Colorado Commission on Criminal and Juvenile Justice

White Paper from the Treatment Funding Working Group

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Division of Criminal Justice
Department of Public Safety
700 Kipling, Denver Colorado 80215
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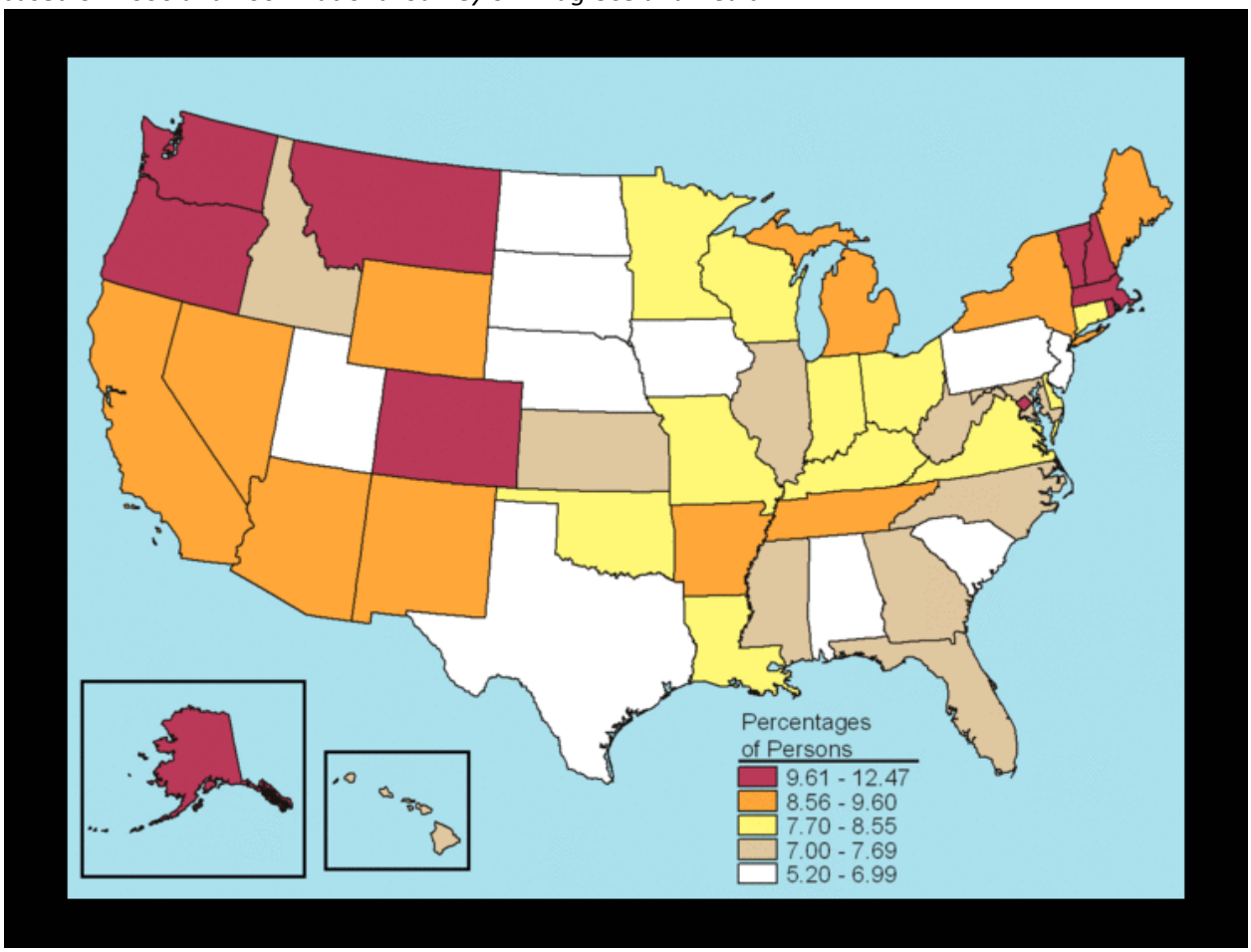
Illicit Drug Use in Past Month among Persons Aged 12 or Older: Annual average percentages, based on 2006 and 2007 *National Survey on Drug Use and Health*



Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2006 and 2007.

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Meeting the public health and public safety needs of our communities demands a fully collaborative campaign involving both the behavioral health and criminal justice systems. Neither system can continue business as usual. The criminal justice system needs to do an adequate job of screening, assessing and individualizing responses to detainees and inmates identified with [behavioral health problems]. The behavioral health system needs to refine and deliver evidence-based practices…to address factors associated with criminal recidivism….

---**A Call to Action***,* National Leadership Forum for Behavioral Health/Criminal Justice Services (July 2009:8)

EXECUTIVE SUMMARY

Introduction and purpose. In 2009, the Commission on Criminal and Juvenile Justice and its Drug Policy Task Force recommended that the public policy of Colorado recognize alcoholism and substance addiction as illnesses and public health problems affecting the general welfare of the state. The Commission made a number of recommendations regarding the need to prioritize treatment for offenders with behavioral health disorders. But the members of the Commission also generally agreed that its recommendations regarding treatment require that treatment be available and accessible to the offender population. The Commission established a Treatment Funding Working Group to investigate issues related to treatment availability and treatment funding allocations.

Behavioral health treatment is a mechanism for reducing the risk to reoffend in the future and therefore is a public safety strategy. Those involved in the justice system who have behavioral health problems must be evaluated for dangerousness and threatening behaviors that, when present, must be contained. However, without consistently integrating treatment into the criminal justice sanctioning process, the underlying problems that contribute to criminal behavior and victimization remain unaddressed.

The Working Group early on agreed that the issues of treatment availability and funding cannot be considered without placing substance abuse in the larger context of co-occurring mental health disorders (the combination of substance use disorders and mental illness is referred to as *behavioral health*), prevalence rates, the science of addiction, the criminal justice response to relapse, and treatment effectiveness. This report seeks to address these issues.

While the report focuses on adults in the justice system, the Working Group recognizes that those in the juvenile justice system are equally important, as are efforts to prevent these problems and to intervene early.

Background. Approximately 20% of the offender population is serving a sentence for a drug offense but between 60-80% have substance use disorders. Many of these individuals also have serious mental health problems.[1] Without appropriate treatment, this very high proportion of offenders with substance use disorders, mental health problems, or both, may continue criminal activity. Recidivism reduction and public safety require effectively addressing the behavioral health needs of offenders in prison and those serving sentences in the community.[2] Behavioral health treatment is a mechanism for reducing the risk to reoffend in the future and is therefore a public safety strategy. Those involved in the justice system who have behavioral health problems must be evaluated for dangerousness and threatening behaviors that, when present, must be contained. However, without consistently integrating treatment into the criminal justice sanctioning process, the underlying problems that contribute to criminal behavior and victimization remain unaddressed.

Professional expertise. Because of the prevalence of serious behavioral health problems among the offender population, the Working Group developed this report to expand the knowledge base of professionals working in the fields of criminal justice and behavioral health. The Working Group recognizes that criminal justice professionals who intend to provide the highest level of service and

[1] For example, while 9-10% of the general population have a substance use disorder, nearly half (46%) of individuals with schizophrenia and over one-fourth (27%) of those with major depressive disorder report problems with illegal drug use. These figures may be higher for criminal justice populations. National Institute on Drug Abuse. (2008). Comorbidity: Addiction and other mental illnesses, available at http://www.drugabuse.gov/researchreports/comorbidity.

[2] The combination of drug abuse/addiction and other mental health issues is referred to as "behavioral health problems."

expertise when conducting their job will want to stay informed of relevant developments and emerging empirical findings. Understanding the science of addiction and recovery will improve decision making and can improve interactions between offenders and justice personnel when professionals to use their knowledge and decision making to promote recovery, thus enhancing public safety.

Because of the prevalence of serious behavioral health problems among the offender population, the Working Group developed this report to expand the knowledge base of professionals working in the fields of criminal justice and behavioral health.

Understanding the science of addiction and recovery will improve decision making and can improve interactions between offenders and justice personnel when professionals use their knowledge and decision making to promote recovery, thus enhancing public safety.

The science of addiction. Addiction is more than lots of drug and alcohol use. A range of scientific studies has demonstrated that chronic drug use changes the brain in fundamental ways that exist long after drug use is stopped. By using advanced brain imaging technologies, scientists can see the biological core of addiction.[3] Scientific evidence supports a blended public health/public safety approach to dealing with the addicted offender. Based on brain research, scientists have defined addiction as a chronic and, for many people, reoccurring disease characterized by compulsive drug seeking and use that results from prolonged effects of drugs on the brain. Treatment strategies must therefore include biopsychosocial methods using the principles of chronic illness care. Not only must the underlying brain disease be treated, but the behavioral and social elements must also be addressed, as it is done with other brain diseases, including stroke, schizophrenia, and Alzheimer's disease.[4]

Individual responsibility. Because addiction begins with a voluntary behavior, and is expressed in the form of excess behavior, it is often assumed that individuals should be able to quit by force of will alone. However, since their brains have been altered by drug use, very few addicts stop on their own.[5] Research has provided overwhelming evidence that not only do alcohol and other drugs interfere with normal brain functioning by creating powerful feelings of pleasure, but they also have long-term effects on brain metabolism and activity. This is why many individuals continue to use alcohol and drugs despite serious personal, social and legal consequences.

Because addiction begins with a voluntary behavior, and is expressed in the form of excess behavior, it is often assumed that individuals should be able to quit by force of will alone. However, since their brains have been altered by drug use, very few addicts stop on their own.

Scientists and medical experts today consider drug addiction a mental illness because of the profound ways drug use alters the brain. To complicate matters further, many of those with substance use disorders also suffer from other mental illnesses and may begin abusing drugs as a form of self-medication. Illicit drug use and alcohol can sometimes temporarily relieve some of the symptoms associated with mental illness such as stress, anxiety, social inhibitions or depression while aggravating the condition in the long term.[6]

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[3] Mark Stanford, Director of Medical and Clinical Services, Department of Alcohol & Drug Services, Addiction Medicine Division, Santa Clara County Health & Hospital System, reviewing the literature in an editorial in the San Jose *Mercury News*, December 29, 2008; see also Fowler, J.S., Volkow, N.D., Kassed, C.A., & Chang, L. (2007). Imaging the addicted human brain. *Science Practice Perspective 3*(2), 4-16; and National Institute on Drug Abuse at http://www.nida.nih.gov/scienceofaddiction/brain.html.

[4] Leshner, A. I. (2007). Addiction is a brain disease. *Issues in Science and Technology, On-line.* National Academy of Sciences, National Academy of Engineering, Institutes of Medicine, University of Texas. Available at http://www.issues.org/17.3/leshner.htm.

[5] Dennis, M.L., Scott, C.K., Funk, R. & Foss, M.A. (2005). The duration and correlates of addiction and treatment careers. *Journal of Substance Abuse Treatment, 28,* 51-S62; McLellan, A.T., O'Brien, C.O., & Kleber, H.D. (2000). Drug dependence, a chronic mental illness: Implications for treatment, insurance and outcomes evaluation. *Journal of the American Medical Association 284(*13), 1689-1695.

[6] National Institute on Drug Abuse. (2008). *Comorbidity: Addiction and other mental illnesses*, available at http://www.drugabuse.gov/researchreports/comorbidity.

This combination of issues--substance use disorders, mental illness, and individual responsibility—requires a knowledgeable and multidisciplinary response when an individual's behavioral health problems result in criminal behavior. Since recidivism and victimization reduction is a Commission goal, routinely recognizing and addressing this complex interplay as a *common* circumstance for the majority of justice-involved individuals would improve the health and safety of our communities.

Recognizing the role of individual responsibility, the Commission's new paradigm would combine personal accountability, risk and needs assessments, and criminal penalties, with appropriate treatment, sanctions and behavioral incentives, for individuals who are addicted to substances and involved in criminal behavior.. Using empirically-based risk and needs assessments, the system would differentiate among offenders whose criminal behavior is primarily driven by behavioral health problems and those whose criminal behavior is related primarily to antisocial attitudes and a pro-criminal lifestyle.

New paradigm. The Commission's new model would combine personal accountability, risk and needs assessments, and criminal penalties, with appropriate treatment, sanctions and behavioral incentives, for individuals who are addicted to substances and involved in criminal behavior. Using empirically-based risk and needs assessments, the system would differentiate among offenders whose criminal behavior is primarily driven by behavioral health problems and those whose criminal behavior is related primarily to antisocial attitudes and a pro-criminal lifestyle.[7]

The science of relapse and recovery. Research has documented in dozens of studies that the progress of many patients is marked by cycles of recovery, relapse and repeated treatments, often spanning over many years before eventually resulting in stable recovery, permanent disability, or death.[8] The traditional acute care approach to behavioral health has encouraged the idea that offenders entering addiction treatment should be cured and able to maintain lifelong abstinence following a single episode of treatment.[9, 10]

While many jurisdictions in Colorado operate problem solving/accountability courts such as drug courts, meaningful recidivism reduction requires that the justice system systematically respond to behavioral health problems as a chronic rather than an acute medical event. A chronic disease must be managed over time. Addressing behavioral health problems as an acute, one-time event misses a critical opportunity to improve the health and safety of our communities.

The National Institute of Drug Abuse reports the need to leverage the legal coercion built into criminal justice system requirements to motivate individuals to engage in treatment, stay in treatment longer, complete treatment, and participate in long-term aftercare and illness management.

The National Institute of Drug Abuse reports the need to leverage the legal coercion built into criminal justice system requirements to motivate individuals to engage in treatment, stay in treatment

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[7] The Commission's recommendations on drug sentencing can be found in its November 2009 report and the December 2009 addendum to that report, at the following links: http://cdpsweb.state.co.us/cccjj/PDF/2009_Nov_Report/SB09-286-Report_11-30-09.pdf and http://cdpsweb.state.co.us/cccjj/PDF/2009_Nov_Report/SB09-286-Report_Addendum12-22-09.pdf. The portions of the recommendations quoted here are on pages 2 and 3 of the December addendum.

[8] For an excellent review, see Hubble, M.A., Duncan, B.L., & Miller, S.D. (2001). The heart and soul of change: What works in therapy. Washington, D.C.: American Psychological Association, and Duncan, B.L., Miller, S.D., Wampold, B.E., & Hubble, M.A. (2009). The heart and soul of change: Delivering what works in therapy. Washington, D.C.: American Psychological Association.

[9] Excerpts from Mark Stanford, Director of Medical and Clinical Services, Department of Alcohol & Drug Services, Addiction Medicine Division, Santa Clara County Health & Hospital System, reviewing the literature in an editorial in the San Jose Mercury News, December 29, 2008.

[10] Dennis, M.L., Scott, C.K., Funk, R. & Foss, M.A. (2005). The duration and correlates of addiction and treatment careers. Journal of Substance Abuse Treatment, 28,51-S62.

longer, complete treatment, and participate in long-term aftercare and illness management. Like other chronic and potentially fatal conditions such as heart disease or diabetes, treatment of addiction refers to an extended process of diagnosis, treatment of acute symptoms, identification and management of circumstances that initially may have promoted the use of substances, and development of lifelong strategies to minimize the likelihood of ongoing use. Treatment is a continuum of different types and intensities of services over a long period of time.[11] Without consistently integrating treatment into the criminal justice sanctioning process, the underlying problems that contribute to criminal behavior and victimization remain unaddressed.

Too often treatment episodes are brief, sometimes lasting only a few weeks, based on the notion that a client who enters and completes a single episode of care should then be able to maintain abstinence and continue the recovery process independently. Although some individuals can successfully recover within this framework, more than half the clients entering substance abuse treatment today require multiple episodes of care over several years to achieve and sustain recovery.

Does treatment work? Criminal justice professionals in Colorado and elsewhere usually see the highest risk individuals with multiple problems—many are unemployed, lack housing or transportation, live in poverty, or have family problems. Very often, these individuals have been involved in prior criminal episodes. These "frequent flyers," as they are sometimes called, lead criminal justice practitioners to question the efficacy of treatment and the commitment of the offender to control their addictive behaviors.

Indeed, a 2009 study by Colorado's Division of Behavioral Health found a constellation of problems associated with individuals referred to services. Nearly half (44%) had a current mental health problem and, of these, the group was significantly likely to have been referred by the justice system, had prior treatment episodes, had prior placement in more intensive services, and have moderate to severe problems with family, socialization, work or school, and prior hospitalizations.[12] Many of these individuals are repeat offenders, validating the perceptions of law enforcement and court personnel.[13]

However, the science concludes that appropriate treatment is "sustained care recovery management," a structured process of accessing and completing a range of services. Client progress in early recovery is often marked by episodes of stress, resumed drug use or full-blown relapse, and multiple treatment admissions. Too often treatment episodes are brief, sometimes lasting only a few weeks, based on the notion that a client who enters and completes a single episode of care should then be able to maintain abstinence and continue the recovery process independently. Although some individuals can successfully recover within this framework, **more than half the clients entering substance abuse treatment today require multiple episodes of care over several years to achieve and sustain recovery.** Studies of mental health treatment report similar findings. Retrospective and prospective treatment

[11] Mark Stanford, Director of Medical and Clinical Services, Department of Alcohol & Drug Services, Addiction Medicine Division, Santa Clara County Health & Hospital System, reviewing the literature in an editorial in the San Jose *Mercury News*, December 29, 2008.

[12] Division of Behavioral Health. (October 31, 2009). *The costs and effectiveness of substance use disorder programs in the state of Colorado.* Report to the General Assembly, House and Senate Health and Human Services Committee. Denver, CO: Colorado Department of Human Services.

[13] In a meta-analysis of 125 studies, nearly 50% of clients dropped out of treatment. Predictors of dropout were substance abuse, minority status and lower education. See Wierzbicki, M. & Pekarik, G. (1993). A meta-analysis of psychotherapy dropout. *Professional Psychology: Research and Practice, 29*, 190-195.

studies report that most participants initiate three to four episodes of treatment over multiple years before reaching a stable state of abstinence.[14, 15]

In Colorado, approximately half of those who enter treatment in programs licensed by DBH complete that episode of treatment. This finding mirrors the outcomes reported in the larger treatment literature.

In Colorado, approximately half of those who enter treatment in programs licensed by DBH complete that episode of treatment. This finding mirrors the outcomes reported in the larger treatment literature.[16] This confirms that relapse is relatively common, and it means that about half of those sent to treatment by the court will require continuing or additional treatment episodes.

Despite the likelihood of relapse, research shows the durability of treatment gains. Note that treatment gains often occur despite the type of therapeutic intervention. While corrections research supports cognitive behavior therapy for addressing criminogenic, antisocial attitudes and behaviors, the treatment literature concludes that 40% of the improvement in clients is attributable to client variables and non-therapy variables.[17] Since non-therapy variables have been found to significantly contribute to treatment success, individuals working in the justice system can contribute to each client's efforts: "Relapse can be reduced by encouraging and reinforcing the clients' belief in their ability to cope with the inevitable, temporary setbacks likely to be experienced" during and after therapy.[18] Justice professionals must also assess risk for dangerousness and contain individuals that threaten public safety but, when possible, reinstating treatment and applying sanctions that support treatment are likely to promote long term recidivism reduction.

The National Institute on Drug Abuse states that outcomes for substance abusing individuals can be improved by cross-agency coordination and collaboration of criminal justice professionals, substance use disorder treatment providers, and other social service agencies. By working together, the criminal justice and treatment systems can optimize resources to benefit the health, safety, and well-being of individuals and the communities they serve. Drug courts epitomize this type of response, and multiple studies have documented their effectiveness.[19]

Individuals working in the justice system can contribute to each client's treatment efforts. Experts agree that relapse can be reduced by encouraging and reinforcing the clients' belief in their ability to cope with the inevitable, temporary setbacks likely to be experienced during and after therapy.

Multiple methods of studying outcomes in Colorado, reviewed in Section Four, show that treatment outcomes are commensurate with those found in the literature: approximately half of individuals successfully complete the treatment episodes. Progress in our understanding is limited by lack of integrated data systems, and lack

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[14] Dennis, M.L., Scott, C.K., Funk, R., & Foss, M.A.(2005). The duration and correlates of addiction and treatment careers. *Journal of Substance Abuse Treatment, 28,* 51-S62.

[15] Excerpts from Mark Stanford, Director of Medical and Clinical Services, Department of Alcohol & Drug Services, Addiction Medicine Division, Santa Clara County Health & Hospital System, reviewing the literature in an editorial in the San Jose *Mercury News*, December 29, 2008.

[16] Dennis, M.L., Scott, C.K., Funk, R., & Foss, M.A. (2005). The duration and correlates of addiction and treatment careers. Journal of Substance Abuse Treatment, 28, 51-62.

[17] Asay, T.P. & Lambert, M.J. (2001). The empirical case for the Common Factors in Therapy: Quantitative findings. In Hubble, M. A., Duncan, B.L., & Miller, S.D. (Eds.), The Heart and Soul of Change: What works in therapy. pp.33-55 Washington, DC: American Psychological Association.

[18] Ibid. Page 42-43.

[19] A meta-analysis of 24 drug court studies was conducted; the U.S. Government Accountability Office (2005) reviewed 27 drug court evaluations in 2005; California's Judicial Council (2003) studied drug courts in 17 counties and found $43M in averted incarceration costs. Mackenzie, D.L. (2006). What works in Corrections: Reducing the criminal activities of offenders and delinquents. New York, NY: Cambridge University Press. See Przybylski (2008) at http://dcj.state.co.us/ors/pdf/docs/WW08_022808.pdf at for a review.

of data to measure individual need level and level of services provided, combined with lack of information about corresponding outcomes such as improved mental and physical health, employment, family stability, and other measures of recovery. Experts recommend re-engineering systems of care where treatment interventions take place, and integrating these systems with the justice system, to increase success rates and improve the quality of life in our communities by holding both systems accountable for bringing science into practice.[20]

The effectiveness of substance abuse treatment and the associated cost benefit has been confirmed by research which shows that substance abuse treatment provides up to $7 in taxpayer benefits for every $1 in cost. When savings related to health care are included, total savings can exceed costs by a ratio of 12 to 1.1 This compares to less than $.40 in return for every dollar spent incarcerating drug offenders.

Treatment is cost effective. Studies show that when addicted offenders are provided with well-structured drug treatment while under criminal justice control, subsequent drug use is reduced by 50-60% and criminal behavior is reduced by more than 40%. Further, the effectiveness of substance abuse treatment and the associated cost benefit, has been confirmed by research which shows that substance abuse treatment provides up to $7 in taxpayer benefits for every $1 in cost. When savings related to health care are included, total savings can exceed costs by a ratio of 12 to 1.[21] This compares to less than $.40 in return for every dollar spent incarcerating drug offenders.[22] In addition, drug treatment reduces the risk of HIV infection by six-fold, improves prospects for employment by 40%.[23]

It is difficult to track the myriad of funding sources for behavioral health treatment. It also is difficult to track the status and outcomes of individuals receiving treatment, the level of assessed need, the level of treatment received (and whether these were appropriately matched), and the quality of services delivered. Without integrated data systems that collect these and other critical pieces of information (such as improved mental and physical health, employment, family stability, and other measures of recovery), gaps in services are difficult to quantify.

Moreover, entry into drug treatment need not be completely voluntary in order for it to work. In fact, studies suggest that increased pressure to stay in treatment--whether from the legal system or from family members or employers--actually increases the amount of time patients remain in treatment and improves their treatment outcomes.[24]

Treatment availability and funding in Colorado. The 2008 National Survey on Drug Use and Health found that 23 million individuals aged 12 or older needed treatment for alcohol or illicit drug use problems and only 9.2% received treatment at a specialty facility that year.[25] It is unlikely that treatment expansion will sufficiently meet the need for services any time soon. Colorado relies heavily on money from offenders to subsidize treatment for all offenders and also expects

[20] Excerpts from Mark Stanford, Director of Medical and Clinical Services, Department of Alcohol & Drug Services, Addiction Medicine Division, Santa Clara County Health & Hospital System, reviewing the literature in an editorial in the San Jose Mercury News, December 29, 2008.
[21] Ibid.
[22] For more information, see Przybylski, R. (2009). Correctional and sentencing reform for drug offenders: Research findings on selected key issues. Report commissioned on behalf of the Colorado Criminal Justice Reform Coalition. Lakewood, CO: RKC Group. Available at http://www.ccjrc.org/pdf/Correctional_and _Sentencing_Reform_for_Drug_Offenders.pdf.
[23] National Institute on Drug Abuse (2006). Principles of substance abuse treatment for criminal justice populations: A research-based guide. Washington, D.C.: National Institute of Health, U.S. Department of Health and Human Services. NIJ Publication No. 06-5316.
[24] Kelly, J.F. Finney, J.W., & Moos, R. (2006). Substance use disorder patients who are mandated to treatment: Characteristics, treatment process, and 1- and 5-year outcomes. Journal of Substance Abuse Treatment 28:213-223. Summarized at http://archives.drugabuse.gov/NIDA_notes/NNvol20N6/Court.html.
[25] Substance Abuse and Mental Health Services Administration. (2009). Results from the 2008 National Survey on Drug Use and Health: National Findings. Rockville, MD: Office of Applied Studies, NSDUH Series, United States Department of Health and Human Services Publication No. SMA 09-4434.

them to pay for their own court-ordered behavioral health treatment. Statute levies many fees, fines and surcharges against the offender along with the priority for payment.[26] Details of state funding sources and programs can be found in Section Five of the report.

In FY 2010, approximately $26M in state funding was allocated to the Division of Probation Services, the Division of Criminal Justice (for the Office of Community Corrections), and the Division of Behavioral Health to support services for those involved in the justice system. Bills passed in the 2010 legislative session substantially increased funding for behavioral health treatment to $34M, based in part on savings generated by bills promoted by the Commission. These resources do not include federal block grants, other grants, local resources, self-pay, insurance, or prison programming dollars, nor do they include the federal dollars directed specifically toward DUI/DWAI education and treatment.

Because of the variety of sources, it is difficult to track the funding for behavioral health treatment. As mentioned above, it is also difficult to track the status and outcomes of individuals receiving treatment, the level of assessed need, the level of treatment received (and whether these were appropriately matched), and the quality of services delivered. However, the additional funding appropriated to behavioral health services `for offenders by the FY 2010 General Assembly is encouraging (summarized in Table E1). Additionally, the federal Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act, will expand Medicaid in the coming years, significantly improving access to substance abuse and mental health services for many in the justice system.

Table E1. Summary of Table 8, state funding for behavioral health treatment

Division of Probation Services	$10,932,013 (FY 2010)
Division of Behavioral Health	$10,572,787 (FY 2010)
Office of Community Corrections, Division of Criminal Justice	$7,349,751 (FY 2011)
FY 2011 Legislation that expanded funding for Behavioral Health Treatment	$5,152,600 (approx)
• House Bill 10-1347	$550,000
• House Bill 10-1352	$1,468,196
• House Bill 10-1360	$1,545,409 (Community Corrections) $2,557,225 (DOC)
• House Bill 10-1284	$2,000,000

Conclusion. The fact that addiction is a chronic, relapsing disease of the brain is a new concept for much of the general public and for many policymakers. The consequence of this enormous informational gap is a significant delay in gaining control over the drug abuse problem. For example, there is the tendency for people to see addiction as a social problem that should be dealt with by social solutions only, and particularly via the criminal justice system.[27] However, science - as reviewed in this report - has demonstrated that drug addiction is as much a health problem as it is a social problem. Redefining

[26] Colorado Revised Statutes, 18-1.3-204(2.5).
[27] Excerpts from Mark Stanford, Director of Medical and Clinical Services, Department of Alcohol & Drug Services, Addiction Medicine Division, Santa Clara County Health & Hospital System, reviewing the literature in an editorial in the San Jose *Mercury News,* December 29, 2008.

treatment as “sustained care recovery management,” holding offenders accountable for their behavior, assessing risk as well as treatment need, and distinguishing between individuals whose criminal behavior is related to behavioral health problems from those whose behavior is deeply rooted in an antisocial and violent lifestyle, furthers the treatment/accountability sentencing paradigm promoted by the Commission. This report is intended to place this new paradigm in the larger context of co-occurring mental health disorders (the combination of substance use disorders and mental illness is referred to as *behavioral health*), prevalence rates, the science of addiction, the criminal justice response to relapse, and treatment effectiveness.

INTRODUCTION

Background and purpose of this paper

Background. Approximately 20% of the offender population is serving a sentence for a drug offense but between 60-80% have substance use disorders. Many of these individuals also have serious mental health problems. Without appropriate treatment, this very high proportion of offenders with substance use disorders or mental health problems, or both, may continue criminal activity.

Recognizing the role of individual responsibility, the Commission's new paradigm would combine personal accountability, risk and needs assessments, criminal penalties, and appropriate treatment, sanctions and behavioral incentives for individuals who are addicted to substances and convicted of criminal offenses.

Recidivism reduction and public safety require effectively addressing the behavioral health needs of offenders in prison and those serving sentences in the community.[28] Behavioral health treatment is a mechanism for reducing the risk to reoffend in the future and is therefore a public safety strategy. Those involved in the justice system who have behavioral health problems must also be evaluated for dangerousness and threatening behaviors that, when present, must be contained. However, without consistently integrating treatment into the criminal justice sanctioning process, the underlying problems that contribute to criminal behavior and victimization remain unaddressed.

In 2009, the Commission and its Drug Policy Task Force recommended that the public policy of Colorado recognize alcoholism and substance use disorders as illnesses and public health problems affecting the general welfare of the state.[29] To this end, the Commission made a series of recommendations concerning the need to prioritize treatment for certain alcohol- and drug-involved offenders, and to promote evidence-based sentencing practices and community-based interventions.

Individual responsibility. Recognizing the role of individual responsibility, the Commission's new paradigm would combine personal accountability, risk and needs assessments, criminal penalties, and appropriate treatment, sanctions and behavioral incentives for individuals who are addicted to substances and convicted of criminal offenses. Using empirically-based risk and needs assessments, the system would differentiate among offenders whose criminal behavior is primarily driven by behavioral health problems and those whose criminal behavior is related primarily to antisocial attitudes and a pro-criminal lifestyle.

Purpose of this report

Commission and Drug Policy Task Force members generally agreed that any significant departure from current law requires that treatment resources be in place before changing to the new approach. To this end, the Treatment Funding Working Group was established in November 2009 to investigate issues related to current treatment availability and funding allocations. The Working Group decided that this information should be placed in the larger context of prevalence rates, the science of addiction, the criminal justice

The fact that addiction is a chronic, relapsing disease of the brain is a new concept for much of the general public and for many policymakers. The consequence of this enormous informational gap is a significant delay in gaining control over the drug abuse problem.

[28] The combination of drug abuse/addiction and other mental health issues is referred to as "behavioral health problems."
[29] December addendum to the Commission's November 2009 report, page 2.

response to relapse, and treatment effectiveness. These issues are addressed in this report.

Criminal justice professionals who intend to provide the highest level of service and expertise when conducting their job will want to stay informed of relevant developments and emerging empirical findings. Because of the prevalence of serious behavioral health problems among the offender population, the Working Group developed this report to expand the knowledge base of criminal justice professionals. The information provided here should become an integral part of case management and decision making. While this report focuses on adults in the justice system, those in the juvenile justice system are equally important, as are efforts to prevent these problems and to intervene early.

The traditional criminal justice response to drug addiction and mental illness - which treats these as acute rather than chronic conditions - misses a critical opportunity to improve the health and safety of our communities. Without consistently integrating treatment into the criminal justice sanctioning process, the underlying problems that contribute to criminal behavior and victimization remain unaddressed.

Behavioral health. It is estimated that close to 80% of the people entering substance use disorder treatment also present with one or more co-occurring psychiatric disorders.[30] Because of the intersection between substance use disorders and mental illness, discussed later in this paper, the Working Group expanded its role to include behavioral health treatment.[31] This paper summarizes behavioral health funding sources and allocations, service gaps, and barriers to the allocation of services.

In addition to tasks assigned by the Commission, outlined above, this paper is intended to meet the following objectives:

- address questions raised by Commission and members of its task forces,
- educate interested parties on the rationale underlying the critical need to synchronize behavioral health treatment and criminal justice supervision,
- provide information on substance use disorder treatment funding and service availability, and
- discuss treatment effectiveness.

The Working Group concurs that the traditional criminal justice response to drug addiction and mental illness - which treats these as acute rather than chronic problems requiring management over time - misses a critical opportunity to improve the health and safety of our communities. Without consistently integrating treatment into the criminal justice sanctioning process, the underlying problems that contribute to criminal behavior and victimization remain unaddressed.

By way of introduction, then, this paper begins with a quote from Commission Recommendation #D-1 (2009), providing the philosophical framework for a new sentencing approach to substance-involved offenders. The following recommendation pertains to Colorado Revised Statutes Article 18, Uniform Controlled Substances Act of 1992. Article 18, Part 4 (18-18-401) is the legislative declaration that accompanies a description of the offenses and penalties associated with unlawful use, possession, sale, dispensing, manufacture and distribution of controlled substances.

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[30] For a summary see Dennis, M.L., Scott, C.K., Funk, R., & Foss, M.A. (2005). The duration and correlates of addiction and treatment careers. *Journal of Substance Abuse Treatment* 28, *(Suppl. 1):* 51-62.

[31] The term *behavioral health* refers to both substance use disorders and mental illness.

Commission recommendation D-1[32]

The following policy statement…[was] developed, in part, as a proposed replacement of C.R.S. 18-18-401. Providing community–based treatment for offenders who suffer from alcoholism and drug abuse—and mental health problems associated with these addictions—will improve public safety by reducing the likelihood that such individuals will have further contact with the criminal justice system. This strategy will provide substantial savings to the taxpayer. Research unequivocally finds that substance abuse treatment reduces both drug use and criminal behavior. Research demonstrates that successful treatment

The Commission's Drug Policy Task Force was comprised of representatives from law enforcement, the defense bar, prosecutors, behavioral health experts, probation, treatment providers and other interested and knowledgeable parties. The group almost unanimously agreed that the current structure and approach to prosecuting drug crimes is frequently ineffective in reducing recidivism and curbing addiction.

a. *Occurs at the earliest possible opportunity;*
b. *Is based on an individual treatment plan that incorporates natural communities and pro-social supports;*
c. *Includes family members when they offer a positive impact on the recovery process; and*
d. *Provides a continuum of community-based services.*

To reduce recidivism, therapeutic intervention rather than incarceration alone is required to treat alcoholism and illicit drug use disorders as well as mental illnesses related to these addictions. Prison should be reserved for violent, frequent or serious offenders. Savings that are achieved from reduced confinement of drug offenders should be directed toward the counties to implement evidence-based sentencing and treatment interventions.

…This approach will combine accountability, risk and needs assessments, criminal penalties, and appropriate treatment for individuals who are addicted to substances and convicted of criminal offenses. This system will differentiate among the following types of individuals:

- *A defendant who is an illegal drug user but is not addicted or involved in other criminal activity;*
- *A defendant who is addicted but is not otherwise engaged in other criminal activity;*
- *A defendant who is addicted and engaged in nonviolent crime to support their addiction;*
- *A defendant who is addicted and engaged in violent crime; and*
- *A defendant who is engaged in drug trafficking or manufacture for profit who is not addicted to illegal drugs.*

This paper should be read in conjunction with the Commission's November 2009 report to the General Assembly and the December 2009 addendum to that report. These reports document the process the Commission and its task forces undertook to reach the conclusion that evidence-based practices require a treatment-oriented approach to criminal sentencing in cases involving substance use disorders. The Commission's Drug Policy Task Force was comprised of representatives from law enforcement, the defense bar, prosecutors, behavioral health experts, probation, treatment providers and other interested and knowledgeable parties. The group almost unanimously agreed that the current structure

[32] The Commission's recommendations on drug sentencing can be found in its November 2009 report and the December 2009 addendum to that report, at the following links: http://cdpsweb.state.co.us/cccjj/PDF/2009_Nov_Report/SB09-286-Report_11-30-09.pdf and http://cdpsweb.state.co.us/cccjj/PDF/2009_Nov_Report/SB09-286-Report_Addendum12-22-09.pdf. The portions of the recommendations quoted here are on pages 2 and 3 of the December addendum.

and approach to prosecuting drug crimes is frequently ineffective in reducing recidivism and curbing addiction.

Need for a new approach. High rates of recidivism, high rates of substance use disorders in the offender population, and new research on the effect of addiction on the brain and behavior (summarized below) suggest it is time for a new approach. The effectiveness of substance abuse treatment in the reduction of recidivism and victimization, and the associated cost benefit, has been confirmed by research finding that substance abuse treatment provides up to $7 in taxpayer benefits for every $1 in cost. When savings related to health care are included, total savings can exceed costs by a ratio of 12 to 1. This compares to less than $.40 in return for every dollar spent incarcerating drug offenders.[33]

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Client progress in early recovery is often marked by episodes of perceived stress, resumed drug use or full-blown relapse, and multiple treatment admissions. Too often treatment episodes are brief, sometimes lasting only a few weeks. This approach to care has been based on the notion that a client who enters and completes a single episode of care should then be able to maintain abstinence and continue the recovery process independently. Although some individuals can successfully recover within this framework, more than half the clients entering substance abuse treatment today require multiple episodes of care over several years to achieve and sustain recovery.[34]

Scientific evidence supports a blended public health/public safety approach to dealing with the addicted offender. Studies show that when addicted offenders are provided with well-structured drug treatment *while under criminal justice control*, subsequent drug use is reduced by 50-60% and criminal behavior is reduced by more than 40%. Moreover, entry into drug treatment need not be completely voluntary in order for it to work. In fact, studies suggest that increased pressure to stay in treatment--whether from the legal system or from family members or employers--actually increases the amount of time patients remain in treatment and improves their treatment outcomes.

The Commission's Drug Policy Task Force determined that a primary omission from current law is a means of ensuring prompt and effective treatment for drug offenders. Commission and Task Force members agreed that, for many offenders, intervention and treatment in the community is a far more effective use of resources than the current escalating system of punishment that often results in a prison sentence for behaviors that are associated with relapse, an expected event in the treatment of addiction. Nevertheless, incarceration may be most appropriate for violent offenders, and behavioral health treatment should be available in jail and prison as a recidivism reduction strategy.

Studies show that when addicted offenders are provided with well-structured drug treatment while under criminal justice control, subsequent drug use is reduced by 50-60% and criminal behavior is reduced by more than 40%.

[33] For more information, see Przybylski, R. (2009). *Correctional and sentencing reform for drug offenders: Research findings on selected key issues.* Report commissioned on behalf of the Colorado Criminal Justice Reform Coalition. Lakewood, CO: RKC Group. Available at http://www.ccjrc.org/pdf/Correctional_and _Sentencing_Reform_for_Drug_Offenders.pdf.

[34] Dennis, M.L., Scott, C.K., Funk, R., & Foss, M.A. (2005). The duration and correlates of addiction and treatment careers. *Journal of Substance Abuse Treatment* 28, *(Suppl. 1):* 51-62.

Members of the Task Force and the Commission support a modification of Colorado's drug laws that would result in a new and possibly separate sentencing grid for these offenses. This approach reduces penalties for individuals whose only crime is possession of drugs for personal use while maintaining prison sentencing options for more serious offenders involved in the sale, distribution and manufacture of controlled substances. The passage of House Bill 10-1352, which reduced many penalties for personal drug use, was a product of the Drug Policy Task Force and was recommended to the General Assembly by the Commission.

For the next (fifth) edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR), the American Psychiatric Association has recommended that substance use disorder replace the current definitions of dependence/addiction and abuse.

Definitions of substance abuse, dependence, and addiction

Since behavioral health problems are the focus of this paper, it seems prudent to include in this introduction the definitions of substance dependence, addiction, and abuse. Drug *dependence* and *addiction* are used synonymously in the medical field; abuse is a component of dependence/addiction. For the next (fifth) edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR), the American Psychiatric Association has recommended that *substance use disorder* replace the current definitions of dependence/addiction and abuse. The words abuse, addiction and substance use disorder are used throughout this paper.

Dependence/addiction. According to the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV-TR) (2000), substance dependence is a cluster of cognitive, behavioral, and physiological symptoms indicating that the individual continues use of the substance despite significant substance-related problems. The consequences of abuse, defined below, are primarily social consequences; the consequences of dependence are physiological and behavioral, defined by tolerance, withdrawal, and compulsive drug-taking behavior. Dependence or addiction is identified by substance use history which includes the following:

1. substance abuse (see below);
2. continuation of use despite related problems;
3. increase in tolerance (more of the drug is needed to achieve the same effect); and
4. withdrawal symptoms.

Substance abuse. Substance abuse is a maladaptive pattern of substance use leading to significant impairment in functioning or psychological distress. One of the following must be present within a 12 month period:

1. recurrent use resulting in a failure to fulfill major obligations at work, school, or home;
2. recurrent use in physically hazardous situations (e.g., driving while intoxicated);
3. legal problems resulting from recurrent use, including arrests for substance-related conduct; or
4. continued use despite significant social or interpersonal problems caused or exacerbated by the substance use.

Substance use disorders. As mentioned above, the American Psychiatric Association has recommended that *substance use disorder* replace the current definitions of dependence/addiction and abuse. The new definition proposed by the APA follows:

A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by 2 (or more) of the following, occurring within a 12-month period:

1. *recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home (e.g., repeated absences or poor work performance related to substance use; substance-related absences, suspensions, or expulsions from school; neglect of children or household)*
2. *recurrent substance use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by substance use)*
3. *continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g., arguments with spouse about consequences of intoxication, physical fights)*
4. *tolerance, as defined by either of the following:*
   a. *a need for markedly increased amounts of the substance to achieve intoxication or desired effect*
   b. *markedly diminished effect with continued use of the same amount of the substance (Note: Tolerance is not counted for those taking medications under medical supervision such as analgesics, antidepressants, ant-anxiety medications or beta-blockers.)*
5. *withdrawal, as manifested by either of the following:*
   a. *the characteristic withdrawal syndrome for the substance (refer to Criteria A and B of the criteria sets for Withdrawal from the specific substances)*
   b. *the same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms (Note: Withdrawal is not counted for those taking medications under medical supervision such as analgesics, antidepressants, anti-anxiety medications or beta-blockers.)*
6. *the substance is often taken in larger amounts or over a longer period than was intended*
7. *there is a persistent desire or unsuccessful efforts to cut down or control substance use*
8. *a great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects*
9. *important social, occupational, or recreational activities are given up or reduced because of substance use*
10. *the substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance*
11. *Craving or a strong desire or urge to use a specific substance.*[35]

Substance use disorders are common among individuals in the criminal justice system. In fact, the definitions refer to legal problems resulting from substance use. The DSM-IV-TR also notes that both substance dependence and abuse are difficult to treat and often involve cycles of substance abstinence and use.

[35] See http://www.dsm5.org/ProposedRevisions/Pages/proposedrevision.aspx?rid=431#.

Organization of this paper

The purpose of this paper is to provide the context for the Commission's recommendations for drug policy reform. Section One provides the empirical foundation for developing a new approach to drug-involved offenders that incorporates the science of addiction. Section Two describes treatment need and general service availability in Colorado. Section Three returns to the science of addiction and provides a discussion of how this information can be incorporated into an evidence-based criminal justice response. Section Four reviews state treatment funding and includes a summary table describing the allocation of approximately $34M in state treatment dollars. Section Five summarizes the literature regarding substance abuse treatment efficacy and provides information about the outcomes for specific treatment programs in Colorado.

SECTION ONE
NEW TREATMENT-ACCOUNTABILITY SENTENCING PARADIGM

Commission mandate

Recidivism reduction means decreased victimization and increased public safety.

The Commission on Criminal and Juvenile Justice has a statutory mandate "to enhance public safety, to ensure justice, and to ensure the protection of the rights of victims through the cost effective use of public resources." The mandate further states that "the Commission will focus on evidence-based recidivism reduction initiatives and the cost-effective expenditure of limited criminal justice funds" (C.R.S. 16-11.3-103(1)). This mandate is the foundation of the Commission's work. Recidivism reduction means decreased victimization and increased public safety.

Working Group and focus on substance use disorders and mental illness

In 2009, the Commission's Drug Policy Task Force undertook a careful examination of substance use disorders and criminal justice policy, and made recommendations for reform to the Commission. The Commission then recommended the implementation of a new criminal justice drug policy paradigm[36] which is consistent with three decades of research in the areas of substance abuse and addiction.[37] This paradigm integrates criminal justice sanctions, treatment, and behavioral incentives for offenders with service needs related to alcohol and drug addictions. The Commission empanelled a Treatment Funding Working Group to explore treatment funding, availability, and gaps in services. This paper presents the findings of the Working Group. Because of the clearly documented intersection between drug addiction and mental illness (see Figure 1), the Working Group included those with co-occurring mental illnesses[38] in its discussion here.

The Commission recommended the implementation of a new criminal justice drug policy paradigm. The paradigm is consistent with three decades of research in the areas of substance abuse, addiction, and other mental health disorders. This paradigm integrates criminal justice sanctions, treatment, and behavioral incentives for offenders with service needs related to alcohol and drug addictions.

Figure 1 shows the propensity for illicit drug addiction among individuals with mental illness. While 9-10% of the general population have a substance use disorder, nearly half (46%) of individuals with schizophrenia and over one-fourth (27%) of those with major depressive disorder report problems with illegal drug abuse. Experts think that some people may begin abusing drugs as a form of self-medication because it may temporarily relieve some of the symptoms associated with mental illness such as stress, anxiety, social inhibitions or depression. For example, smoking marijuana may help diminish uncomfortable side effects of medications. On the other hand, marijuana may trigger the onset or relapse of schizophrenia for those who are predisposed to it, and may exacerbate the symptoms.

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[36] Colorado Commission on Criminal and Juvenile Justice (November 2009*). Findings, Recommendations, and Proposed Plan for the Ongoing Study of Sentencing Reform.* Denver, CO: Colorado Division of Criminal Justice, Department of Public Safety. Available at http://dcj.state.co.us/ors/pdf/docs/2009_Nov_Report/SB09-286-Report_11-30-09.pdf

[37] National Institute on Drug Abuse. (2006). *Principles of substance abuse treatment for criminal justice populations: A research-based guide.* Washington, DC: National Institutes of Health, U.S. Department of Health and Human Services. NIJ Publication No. 06-5316.

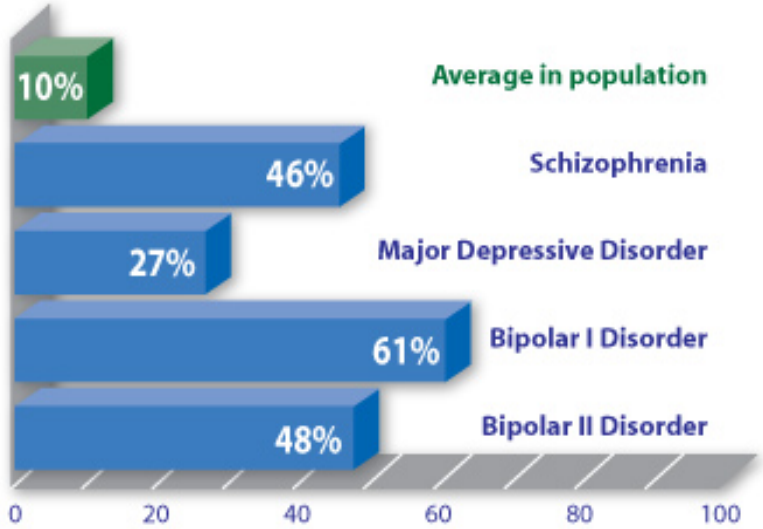
[38] The combination of drug addiction and mental illness is referred to as co-occurring disorders. Given the prevalence of co-occurring disorders among those with substance abuse addictions, the term "behavioral health" problems is used to capture this complex disability.

In addition, stimulants such as cocaine and methamphetamine can cause anxiety, panic attacks, mania, sleep disorders and, in the case of the latter, hallucinations, all of which are or can be symptoms of mental illness.[39] This interaction means that many individuals with mental illness are sometimes addicted to substances. Further, prolonged drug use can lead to a downward spiral of worsening both mental illness and drug addiction, leaving many worse off than they started.

Because justice professionals frequently encounter individuals with behavioral health problems, effectively and deliberately managing these cases to improve public safety requires a basic understanding of the science of drug and alcohol abuse, addiction, and mental illness.

These co-occurring problems are relatively common among those in the justice system. Because justice professionals frequently encounter individuals with behavioral health problems, effectively and deliberately managing these cases to improve public safety requires a basic understanding of the science of drug and alcohol abuse, addiction, and mental illness.

Figure 1. Although 10% of the population is addicted to illicit drugs, addiction is much more common among people with mental disorders



Source: Genetic Science Learning Center (2010, March 26). *Mental Illness: The Challenge of Dual Diagnosis*.[40]

The new paradigm requires understanding addiction

The recommended criminal justice treatment-accountability paradigm is rooted in research. Nora Volkow, M.D., director of the National Institute on Drug Abuse, states the following:

> *…Drug addiction is a mental illness. It is a complex brain disease characterized by compulsive, at times uncontrollable, drug craving, seeking, and use despite devastating consequences–behaviors that stem from drug-induced changes in brain structure and function. These changes occur in some of the same brain areas that are disrupted in*

[39] Ibid.
[40] See http://learn.genetics.utah.edu/content/addiction/issues/mentalillness.html.

various other mental disorders, such as depression, anxiety, or schizophrenia.[41]

Researchers do not know how much drug use is required to create these changes in the brain or whether these effects ever return to normal.[42] But at some dose, frequency, and chronicity, drug use will reliably produce enduring and possibly permanent changes in the brain's reward circuitry involving motivational, emotional, and memory centers of the limbic system. Since up to 80% of individuals in the criminal justice system have behavioral health problems and many are addicted,[43] information about the science of drug addiction is presented in Section Three.

Alcohol and other use begins with an individual's conscious choice, but addiction is not simply a lot of alcohol and drug use. Research has provided overwhelming evidence that not only do alcohol and other drugs interfere with normal brain functioning by creating powerful feelings of pleasure, but they also have long-term effects on brain metabolism and activity.

Studies support the need for the criminal justice system to depart from its conventional approach to addiction and mental illness. Scientific studies in the last decade have identified addiction as a chronic, relapsing disease of the brain. For many, this is a new concept. Historically, addiction treatment approaches have been organized to provide and improve the outcomes of acute episodes of care. Although some individuals can be successfully treated within an acute care framework, more than half of those entering publicly funded addiction programs require multiple episodes of treatment over several years to achieve and sustain recovery.[44] Research has documented in dozens of studies that the progress of many individuals is marked by cycles of recovery, relapse and repeated treatments, often spanning over many years before eventually resulting in stable recovery, permanent disability, or death. The traditional acute care approach to behavioral health has encouraged the idea that offenders entering addiction treatment should be cured and able to maintain lifelong abstinence following a single episode of treatment.[45]

The National Institute of Drug Abuse reports the need to leverage the legal coercion built into criminal justice system requirements to motivate individuals to engage in treatment, stay in treatment longer, complete treatment, and participate in long-term aftercare and illness management. Without consistently integrating treatment into the criminal justice sanctioning process, the underlying problems that contribute to criminal behavior and victimization remain unaddressed.

While many jurisdictions operate problem solving/accountability courts such as drug courts, meaningful recidivism reduction requires that the justice system systematically respond to behavioral health problems as an acute rather than a chronic medical event. A chronic disease must be managed over time. Addressing behavioral health problems as an acute, one-time event misses a critical opportunity to improve the health and safety of our communities.

The National Institute of Drug Abuse reports the need to leverage the

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[41] National Institute on Drug Abuse. (2008). *Comorbidity: Addiction and other mental illnesses*, available at http://www.drugabuse.gov/researchreports/comorbidity.

[42] McLellan, A.T., O'Brien, C.O., & Kleber, H.D. (2000). Drug dependence, a chronic mental illness: Implications for treatment, insurance and outcomes evaluation. *Journal of the American Medical Association 284(*13), 1689-1695.

[43] See Section Two of this paper for information about Colorado offenders.

[44] Dennis, M.L., Scott, C.K., Funk, R. & Foss, M.A. (2005). The duration and correlates of addiction and treatment careers. *Journal of Substance Abuse Treatment, 28*, S51-S62.

[45] Excerpts from Mark Stanford, Director of Medical and Clinical Services, Department of Alcohol & Drug Services, Addiction Medicine Division, Santa Clara County Health & Hospital System, reviewing the literature in an editorial in the San Jose *Mercury News*, December 29, 2008. For complete reviews of the literature, see Hubble, M.A., Duncan, B.L., & Miller, S.D. (2001*). The heart and soul of change: What works in therapy*. Washington, D.C.: American Psychological Association; and Duncan, B.L., Miller, S.D., Wampold, B.E., & Hubble, M.A. (2009). *The heart and soul of change: Delivering what works in therapy.* Washington, D.C.: American Psychological Association.

legal coercion built into criminal justice system requirements to motivate individuals to engage in treatment, stay in treatment longer, complete treatment, and participate in long-term aftercare and illness management. Without consistently integrating treatment into the criminal justice sanctioning process, the underlying problems that contribute to criminal behavior and victimization remain unaddressed.

Because addiction begins with a voluntary behavior, and is expressed in the form of excess behavior, it is often assumed that individuals should be able to quit by force of will alone. However, since their brains have been altered by drug use, very few addicts stop on their own.

Because addiction begins with a voluntary behavior, and is expressed in the form of excess behavior, it is often assumed that individuals should be able to quit by force of will alone. However, since their brains have been altered by drug use, very few addicts stop on their own. By way of example, only 3-7% of smokers who try to quit on their own each year actually succeed.[46] Longitudinal studies of heroin addicts find that few quit on their own. Most have been successfully treated, are in maintenance treatment, or, in the case of about half, die as heroin users.[47] Please see Appendix A, *Addiction is a Brain Disease*, for more information.

Client progress in early recovery is often marked by episodes of high stress, resumed drug use or full-blown relapse, and multiple treatment admissions. Too often treatment episodes are brief, sometimes lasting only a few weeks. This approach to care has been based on the notion that a client who enters and completes a single episode of care should then be able to maintain abstinence and continue the recovery process independently. Although some individuals can successfully recover within this framework, more than half the clients entering substance abuse treatment today require multiple episodes of care over several years to achieve and sustain recovery.[48]

Personal responsibility

Few persons who try drugs or regularly use drugs become addicted according to researchers. However, once addiction begins, there is a predictable developmental sequence marked by significant and persistent changes in brain chemistry and function that leads to uncontrolled, involuntary drug dependence.[49] Nevertheless, medical addiction experts agree that having a brain disease does not mean that individuals are not responsible for their behavior. Personal choice and environmental factors are clearly involved in both the addiction and recovery process. But "there is no reliable cure for drug dependence."[50] Addicted individuals who comply with the recommended regimen of education, counseling, and medication tend to have favorable outcomes during and usually for at least 6 to

Medical addiction experts agree that having a brain disease does not mean that individuals are not responsible for their behavior. Addicted individuals who comply with the recommended regimen of education, counseling, and medication tend to have favorable outcomes during and usually for at least 6 to 12 months followina treatment.

[46] Please see Appendix A: Leshner, A. I. (2007). Addiction is a brain disease. Issues in Science and Technology, On-line: National Academy of Sciences, National Academy of Engineering, Institutes of Medicine, University of Texas. http://www.issues.org/17.3/leshner.htm.
[47] Ibid. This article is included as Appendix A.
[48] Dennis, M.L., Scott, C.K., Funk, R., & Foss, M.A. (2005). The duration and correlates of addiction and treatment careers. Journal of Substance Abuse Treatment, 28, 51-62. See http://www.attcnetwork.org/find/news/attcnews/epubs/addmsg/oct2010article.asp
[49] Ibid.
[50] Ibid, page 1693.

12 months following treatment.[51] Favorable outcomes are most likely when individuals complete treatment programs and then participate in continuing care or maintenance. As with any illness, then, individual behavior becomes a critical part of recovery. At a minimum, individuals must comply with the treatment regimen. Thus, for substance addiction as well as for other chronic diseases, the individual's motivation and behavior are clearly important parts of success in treatment and recovery.

Favorable outcomes are most likely when individuals complete treatment programs and then participate in continuing care or maintenance.

Recognizing the role of individual responsibility, the Commission's new paradigm intends to combine personal accountability, risk and needs assessments, criminal penalties, and appropriate treatment, sanctions and behavioral incentives for individuals who are addicted to substances and convicted of criminal offenses.[52] Using empirically-based risk and needs assessments, the system would differentiate among offenders whose criminal behavior is primarily driven by behavioral health problems and those whose criminal behavior is related primarily to antisocial attitudes and a pro-criminal lifestyle.[53]

Recognizing the role of individual responsibility, the Commission's new paradigm would combine personal accountability, risk and needs assessments, criminal penalties, and appropriate treatment, sanctions and behavioral incentives for individuals who are addicted to substances and convicted of criminal offenses. Using empirically based risk and needs assessments, the system would differentiate among offenders whose criminal behavior is primarily driven by behavioral health problems and those whose criminal behavior is related primarily to antisocial attitudes and a pro criminal lifestyle.

In sum, this new empirically-based paradigm requires that treatment services be available, accessible and effective. This paper is one effort to explore the ability of the state to promote the implementation of the Commission's vision of a new treatment/accountability paradigm for offenders with behavioral health problems. It addresses questions raised by Commission members about the current availability of behavioral health treatment, the effectiveness of that treatment, and current state funding levels.

[51] Ibid. Also see National Institute on Drug Abuse (1999, rev. 2009). *Principles of drug addiction treatment: A research-based guide*. U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse, Rockville, MD.
[52] See http://dcj.state.co.us/ors/pdf/docs/2009_Nov_Report/SB09-286-Report_11-30-09.pdf.
[53] As described by the Commission in Recommendation D-1 and summarized earlier in this paper. Memo from Pete Weir to Governor Ritter and others (December 23, 2009) regarding *Addendum* to November report from the Commission on Criminal and Juvenile Justice, summarized earlier in this paper.

SECTION TWO
THE PROBLEM: SIGNIFICANT TREATMENT NEED

Prevalence rates

Colorado's prevalence rate for illicit drug and alcohol dependence is higher than the national average. Past year alcohol dependence among those aged 26 and older is twice the national average.

Colorado's prevalence rate for illicit drug and alcohol dependence is higher than the national average. Past year alcohol dependence among those aged 26 and older is twice the national average; past year illicit drug dependence is almost 20% higher than the national average.[54, 55] In its 2001 report, the National Center on Addiction and Substance Abuse (CASA) at Columbia University estimated that Colorado spent 6 cents out of every $100 directed toward substance abuse on prevention and treatment, ranking 49th among 50 states.[56]

Nearly 30,000 individuals were arrested in Colorado in 2008 for driving under the influence (DUI) or driving while their ability was impaired (DWAI).[57] Colorado's Division of Probation Services evaluated 27,255 individuals in FY 2008. Of these, 23% had one prior arrest for DUI/DUAI, and 16% had at least two prior DUI/DWAI arrests.

On any given day, well over 110,000 adult felons are in custody or under correctional supervision in Colorado.[58] The majority of these individuals need treatment for substance use disorders or mental health treatment, or both.

- Approximately 80% of adults on probation had some level of alcohol problem or illegal drug use problem in a 2006 study.[59]
- 77% of those in community corrections in 2008 had substance abuse treatment needs and over one-quarter needed mental health services.[60]
- Nearly 80% of offenders under the jurisdiction of the Department of Corrections had moderate to severe substance abuse problems in 2008 and nearly 25% of prisoners had moderate to severe mental health problems (half of these were women).[61]

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[54] *Colorado: States in Brief, Substance Abuse and Mental Health Issues At-A-Glance*. (December 2008). Washington, D.C.: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies.
[55] "Past year" drug use does not refer to a specific calendar year; it refers to survey questions that ask about behaviors "in the past year."
[56] National Center on Addiction and Substance Abuse (January 2001). Shoveling Up: The impact of substance abuse on state budgets. Columbia University, NY. Report available at http://www.casacolumbia.org/templates/publications_reports.aspx. CASA's 2009 estimate found Colorado spending $3.23, a finding disputed by local experts who consider the figure too high.
[57] Colorado Bureau of Investigation. (2008). *Crime in Colorado 2008*. Available at http://cbi.state.co.us/CNC/cic2k8/.
[58] Approximately 23,000 individuals are in prison, 8,000 are on parole, 70,000 are on probation, and 13,000 are in jail.
[59] The source for this figure is data collected from court files by DCJ researchers. Data were collected from a sample of cases in 10 judicial districts (17 counties: Denver, Jefferson, El Paso, Weld, Mesa, Boulder, Broomfield, Douglas, Teller, Gilpin, Jackson, Adams, Arapahoe, Elbert, Lincoln, and Larimer). These judicial districts were chosen based on the top 10 judicial districts for filings in 2005. The sample is made up on 1,271 court cases from 2004, 2005, and 2006 that were sentenced to probation in 2006. Researchers used a subjective scale to code in data in the file using the following measures (1) no problem, (2) yes a problem but no interference with daily functioning, (3) yes a problem and some disruption of daily functioning, and (4) yes a problem with serious disruption of functioning. In FY 2009, 8,660 (22% of the total filings) individuals were filed on for drug charges in district court, according to Table 18, Annual Statistical Report FY 2009, Colorado Judicial Branch.
[60] As measured by the Level of Supervision Inventory (LSI) recorded on the Community Corrections Termination Form. In FY 2008, 1,844 (35.7%) of those who completed community corrections had a drug crime as their most serious charge. Harrison, L. (2010). *Fiscal Year 2008 Community Corrections Program Terminations: Client Needs, Services and Outcomes.* Denver, CO: Office of Research and Statistics, Division of Criminal Justice, Department of Public Safety. Available at http://dcj.state.co.us/ors/pdf/docs/rev-FY%202008%20COMCOR%20Final%20Report.pdf.

- Two of the state's largest jails (Arapahoe and Denver Counties) report that more than 20% of the population has a serious mental health problem[62] while national studies show more than half of jail detainees have alcohol and drug dependencies.[63] In 1991, in one of the few studies of jail inmates with mental illness, Abram and Teplin found that 72 percent had a substance abuse disorder as well; these figures are likely to be even higher today.[64]

The 2008 National Survey on Drug Use and Health found that only 9.2% of those who needed treatment for alcohol and drug use disorders received treatment at a specialty facility. Compared to those in the general population, individuals in the criminal justice system are more likely to receive treatment simply because it is a condition of the sentence and participation is mandated.

These criminal justice prevalence rates are very high compared to general population prevalence rates. Studies put the prevalence of serious mental illness at 4.4%, and substance abuse/dependence at 8.9%.[65] National surveys show that the need for treatment for both mental illness and for substance abuse is highest among men between the ages of 18-25,[66] a group that was likely abusing drugs during adolescence. This is the same segment of the population most likely to be involved in the criminal justice system. These figures reflect the need to strategically link behavioral health services—that is, treatment for substance use disorders or mental illness, or both--and criminal justice system sanctions and interventions.

Treatment need and access

The 2008 National Survey on Drug Use and Health found that only 9.2% of those who needed treatment for alcohol and drug use disorders received treatment at a specialty facility.[67] Compared to those in the general population, individuals in the criminal justice system are more likely to receive treatment simply because it is a condition of the sentence and participation is mandated.

Tens of thousands of individuals in the criminal justice system need behavioral health treatment. But access to treatment is clearly limited. In a report submitted to the General Assembly in October 2009, the Colorado Division of Behavioral Health stated that 46% of 17,488 individual adult clients discharged from substance abuse treatment in FY 2009 were referred by the criminal justice system (excluding DUI/DWAI cases).[68] In the Department of Corrections, programs are provided in nearly every prison and substance abuse therapeutic community programs operate in four prison facilities.[69,70] But in FY 2008,

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[61] Colorado Department of Corrections. (June 2009). Overview of Substance Abuse Treatment Programs, FY 2008. Available at https://exdoc.state.co.us/secure/combo2.0.0/userfiles/folder_5/Overview_SA_Treatment_Services_FY08_2.pdf. In FY 2008, 1,355 (24% of the total) individuals were admitted to the Department of Corrections with a drug offense as their most serious crime of conviction, according to DOC. Department of Corrections. (2009). FY 2008 Annual Statistical Report. Colorado Springs, CO.

[62] Jail data source: Mentally Ill Inmates Task Force, Metro Area County Commissioners. (2008). 2008 Master Axis I Data Report. County Commissioners, Inc. Available at http://www.ccionline.org.

[63] A 2002 survey of jails found that 52 percent of incarcerated women and 44 percent of men met the criteria for alcohol or drug dependence (Karberg & James, 2005, www.ojp.gov/bjs/pub/pdf/sdatji02.pdf).

[64] Abram, K. M., & Teplin, L. A. (1991). Co-occurring disorders among mentally ill jail detainees. American Psychologist, 46, 1036-1045.

[65] Substance Abuse and Mental Health Services Administration. (2009) Results from the 2008 National Survey on Drug Use and Health: National Findings. Rockville, MD: Office of Applied Studies, NSDUH Series, United States Department of Health and Human Services Publication No. SMA 09-4434. Available at http://www.oas.samhsa.gov/nsduh/2k8nsduh/2k8Results.cfm.

[66] Ibid.

[67] Ibid.

[68] Division of Behavioral Health. (October 31, 2009). The costs and effectiveness of substance use disorder programs in the state of Colorado. Report to the General Assembly, House and Senate Health and Human Services Committee. Page 11 and Table 1. Denver, CO: Colorado Department of Human Services.

[69] Colorado Department of Corrections. (June 2009). Overview of Substance Abuse Treatment Programs, FY 2008. Available at https://exdoc.state.co.us/secure/combo2.0.0/userfiles/folder_5/Overview_SA_Treatment_Services_FY08_2.pdf.

more than 24,000 DOC inmates were identified as needing services for substance use disorders and fewer than 10% received this service: 2,131 offenders in DOC in FY 2008 received either substance abuse education or treatment, and 76% completed these programs.[71] Substance abuse education and treatment availability at DOC has decreased every year since FY 2002 when 3,341 offenders received these services.[72]

As another example, in FY 2008, 5,436 individuals participated in community corrections, the state's halfway house system administered by the Division of Criminal Justice. Of the 25.4% that needed mental health treatment, 15.3% received it. Of the 76.6% that needed substance abuse treatment, 69.8% received it.[73]

Information from a special analysis conducted for this paper by the Division of Behavioral Health is presented in Table 1 below.[74] Data were analyzed on over 7,700 non-DUI offenders who discharged from treatment in FY 2009. Nearly three-quarters (73.1%) of the group were discharged from traditional outpatient services, 9.1% were discharged from IRT, 5.8% received intensive outpatient services, 5% were discharged from STIRRT (Short Term Intensive Residential Remediation Treatment), 4.3% from therapeutic communities and less than 1% from day treatment.

Table 1. Treatment placements, non-DUI offenders, FY 2009 (n=7719)

Treatment level	**% of total**
Traditional outpatient	73.1% (5640)
Intensive Residential, IRT	9.1% (705)
Intensive outpatient	5.8% (452)
STIRRT (14 day residential)	5.0% (389)
Therapeutic community	4.3% (329)
Transitional residential	2.5% (190)
Day treatment	0.2% (14)
Total	**100.0% (7719)**

Source: Division of Behavioral Health; treatment discharges. Excludes the following DBH categories: differential assessment only, died and other. Special analysis conducted for this paper by analysts at the Colorado Division of Behavioral Health.

Note that the figures in Table 1 and those earlier that describe participation by offenders in DOC and community corrections reflect treatment involvement only. ***Data are not available for analysis to describe level of need, intensity of treatment, length of treatment participation, level of engagement by the client, or treatment completion.*** Further, concerns exist about the quality of the data that does exist. The need level recorded in client records and automated data systems may reflect what services are available in local jurisdictions—allowing the referral to that service—when the client need level may be greater than the services available.

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[70] A therapeutic community (TC) is a residential treatment modality in use for more than 40 years. TCs differ from other treatment approaches principally in their use of the community, comprising treatment staff and those in recovery, as key agents of change. This approach is often referred to as "community as method." TC members interact in structured and unstructured ways to influence attitudes, perceptions, and behaviors associated with drug use (National Institute on Drug Abuse (2002), *Therapeutic Communities.* Bethesda, MD. Available at http://www.drugabuse.gov/PDF/RRTherapeutic.pdf.

[71] Colorado Department of Corrections. (June 2009). *Overview of Substance Abuse Treatment Programs, FY 2008*. Colorado Springs, CO.

[72] Ibid.

[73] Harrison, L. (2010). *Fiscal Year 2008 Community Corrections Program Terminations: Client Needs, Services and Outcomes.* Denver, CO: Office of Research and Statistics, Division of Criminal Justice, Department of Public Safety. Available at http://dcj.state.co.us/ors/pdf/docs/rev-FY%202008%20COMCOR%20Final%20Report.pdf.

[74] Thanks to Kristen Dixion, research analyst at the Division of Behavioral Health, for conducting this analyses at the request of the author.

Officials at the Division of Probation Services (DPS) emphasize that, while the majority of its clientele needs treatment for substance use disorders, offenders who initially meet with probation officers may be homeless, have serious medical problems (including the need for psychiatric medications), may be in extreme poverty, and may be jobless, or some combination of these. For individuals with basic survival needs, substance abuse treatment may not be the first priority. Stable and affordable housing, transportation assistance such as bus tokens to prevent illegal driving, medications, and finding behavioral health treatment in a single, accessible location are pressing and competing needs for many offenders on probation. All of these needs must be addressed to assist an individual seeking to recover from substance use disorders, according to the National Institute on Drug Abuse (NIDA).[75] In FY 2010, managing a total population of nearly 70,000 adults, the Division of Probation Services was appropriated nearly $10M in cash funds revenues to assist with the range of needs facing both juveniles and adults. Those convicted of sex crimes comprise 7% of the probation population, yet consume nearly one-third of these funds.[76] We return to this topic in Section Four.

For individuals with basic survival needs, substance abuse treatment may not be the first priority. Stable and affordable housing, transportation assistance such as bus tokens to prevent illegal driving, medications, and finding behavioral health treatment in a single, accessible location are pressing and competing needs for many offenders on probation. All of these needs must be addressed to assist an individual seeking to recover from substance abuse addiction, according to the National Institute on Drug Abuse (NIDA).

Although funding and costs are discussed later in this paper, it is noteworthy that the DPS funding described in the paragraph above are primarily cash funds for which the revenue is derived from the collection of fees and surcharges levied against offenders. While historically some general funds for drug testing and electronic monitoring were included in the appropriation, in FY 2010, *all* of these funds were derived from surcharges and fees paid by offenders because general fund dollars were eliminated in that year's budget. In addition, the Joint Budget Committee of the General Assembly took $2.6M from the Offender Services Cash Fund (the largest source for treatment funding) to help balance the overall state budget. Specifically, the $2.6M came from the fund balance of the Offender Services Cash Fund, the revenue for which comes from the collection of the $50/month supervision fees required of adults on probation.

Community treatment

The National Survey on Substance Abuse Treatment Services (N-SSATS) collects information from all facilities in the U.S., both public and private, that provide substance abuse treatment, excluding non-treatment halfway houses, jails, prisons, and other organizations that treat incarcerated clients exclusively. It also excludes solo practitioners. While it underestimates treatment for some criminal justice system clients, the survey found that a total of 36,059 adult clients (criminal justice clients are not differentiated in this total

Of 36,059 adult clients (criminal justice clients are not differentiated in this total count) were in treatment in Colorado on the N-SSATS 1-day census in 2008; 92% of these were in outpatient treatment programs; half of these were in intensive outpatient programs.

[75] According to NIDA: "Often, drug abusing offenders have problems in other areas. Examples include family difficulties, limited social skills, educational and employment problems, mental health disorders, infectious diseases, and other medical problems. Treatment should take these problems into account, because they can increase the risk of drug relapse and criminal recidivism if left unaddressed."See #6 at http://www.drugabuse.gov/PODAT_CJ/faqs/faqs1.html#3.

[76] Sex offender services subsidized by the Division of Probation Services include the psychosexual assessments, sex offender treatment and polygraph examinations.

count) were in treatment in Colorado on the N-SSATS 1-day census in 2008; 92% of these were in outpatient treatment programs; half of these were in intensive outpatient programs.[77]

In FY 2009, 17,488 unique individuals were discharged from substance abuse treatment. Over half, 53%, were referred by the criminal justice system.

The Division of Behavioral Health licenses over 300 behavioral health programs at more than 700 sites across the state;[78] Over 180 programs provide non-DUI offender treatment, and approximately 250 programs provide DUI treatment.[79,80] Note that some programs provided both DUI and non-DUI treatment. Only 42 licensed programs receive public dollars to provide services, indicating that state dollars are *not* funding the majority of treatment that is delivered in Colorado. In 2008, 68 facilities offered some form of residential care, and 9 facilities offered some form of opioid treatment. In 2008, 42% of all facilities with non-DUI offender treatment (185) received some form of federal, state, county, or local government funds, and 171 (39%) facilities had agreements or contracts with managed care organizations for the provision of services for substance use disorders.[81] Two- thirds (69%) of the facilities reported using a sliding fee scale.[82]

Substance abuse treatment. The Colorado Division of Behavioral Health collects and analyzes data on clients discharged from licensed substance abuse treatment providers. DBH's Treatment Management System (TMS) stores admission and discharge data for all services offered by licensed programs, including DUI services.[83] In FY 2009, 17,488 unique individuals, excluding DUI/DWAI offenders, were discharged from substance abuse treatment. Over half, 53%, were referred by the criminal justice system, 16% self-referred, 11% were referred by social services, 12% were referred by a health care provider, and 8% of referrals fell into an "other" category.[84] In addition, DBH records reflect that in FY 2009, 21,130 unique clients were discharged from DUI programs, and 51,850 were discharged from detoxification services, 29,435 of whom were unique. Colorado's unmet need for alcohol treatment and

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[77] SAMHSA. 2008 National Survey of Substance Abuse Treatment Services (N-SSATS). N-SSATS Profile—Colorado 2008. Office of Applied Studies. (Table 6.2a). Washington, D.C.: U.S. Department of Health and Human Services.

[78] Division of Behavioral Health. October 31, 2009. The costs and effectiveness of substance use disorder programs in the state of Colorado. Report to the General Assembly, House and Senate Health and Human Services Committee. Denver, CO: Colorado Department of Human Services.

[79] Briefing paper provided to the Commission's Treatment Funding Working Group on March 1, 2010.

[80] These numbers may belie the fact that public mental health funding is on the decline: in December 2005, Joint Budget Committee of the General Assembly reported that state funding for those with serious mental illness declined by 25 percent over the previous 3 years. Division of Behavioral Health report. (February 2005). An Analysis of Recent Trends in Colorado's Public Mental Health System. (page 3). Denver, CO: Colorado Department of Human Services. Available at http://www.cdhs.state.co.us/dmh/PDFs/An_Analysis_of_Budget_Impacts_on_ColoradoFINAL2.pdf.

[81] SAMHSA. 2008 National survey of Substance Abuse Treatment Services (N-SSATS). N-SSATS Profile—Colorado 2008. Office of Applied Studies. Washington, D.C.: U.S. Department of Health and Human Services.

[82] Ibid.

[83] Recently the system has been expanded to include information about DUI clients while they are receiving services. Each time a client attends a service session, or when an individual is drug tested, data on these events are entered into the TMS and may be instantly retrieved by probation officers who can assess treatment compliance information. This system allows probation officers to respond quickly to signs of relapse or recidivism. This access to data is consistent with the Health Insurance Privacy and Accountability Act (HIPAA) and 42 CFR, Part 2, of the Federal Code which ensures confidentiality for individuals participating in addiction treatment. This system has the potential to be expanded to include non-DUI offenders receiving substance abuse treatment through DBH-licensed providers. Judicial officials have expressed an interest in this expansion. DBH is working with the Managed Service Organizations to develop a plan by which providers can submit data to DBH in real time on the internet.

[84] Division of Behavioral Health. (October 31, 2009). The costs and effectiveness of substance use disorder programs in the state of Colorado. (page 11, figure 1). Report to the General Assembly, House and Senate Health and Human Services Committee. Denver, CO: Colorado Department of Human Services.

unmet need for drug treatment are above the national average for all age groups, but is greatest for those over age 26, according to the National Survey on Drug Use and Health.[85]

The DBH study found that only 36% of low-income adults in the state with serious behavioral health disorders received at least one treatment service in FY 2007. This measure of unmet treatment needs showed considerable geographic variation across the state, with the largest number of adults with unmet serious needs for behavioral health services residing in Denver.

Mental health treatment. The Division of Behavioral Health (DBH) provided at least one mental health treatment service to over 54,000 individuals in FY 2007.[86] While not specific to those in the criminal justice system, the Division of Behavioral Health (DBH) published a report in October 2009 that estimated the "Colorado Population in Need."[87] The study was restricted to households earning less than three times the federal poverty level because, for this population, income limitations mean that this segment of the population is more likely to access public services. In 2007, according to the *Population in Need* report, 42% of the state population met this definition of low income, and since a large proportion of individuals in the criminal justice system have low incomes the findings are especially relevant here. The DBH study found that only 36% of low-income adults in the state with serious behavioral health disorders received at least one treatment service in FY 2007. This measure of unmet treatment needs showed considerable geographic variation across the state, with the largest number of adults with unmet serious needs for behavioral health services residing in Denver. These figures are likely to be underestimates of service need and access since the study is targeted to individuals with limited incomes.[88]

Service need: Cost matters

The *2008 National Survey on Drug Use and Health* included individuals who needed services and did not get services. Among those aged 12 and older who needed and made an effort to get substance abuse treatment but did not receive treatment, 37% reported that they did not have health coverage and could not afford treatment. Twenty-nine percent reported that they were not ready to stop using the drug; 11% said they did not have transportation; 8% reported that they did not know where to go for treatment. Among adults aged 18 and older who needed mental health services but did not receive services, 43% reported that they could not afford the cost of treatment; 20% reported that they did not know where to go for services; another 10% said they worried about being committed or having to take medicine. Since lack of insurance is a significant barrier to treatment it is relevant that, in a study of 267 arrestees booked into the Denver City Jail in early 2009, 70% reported they had no health insurance.[89]

Average costs. In 2009, the Division of Behavioral Health reported that the Division's average client cost was $893 for non-detoxification services rendered by the designated Managed Service Organization and their subcontractor, up from $809 in 2008, and up considerably from $721 in 2005. Clients paid an

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[85] SAMHSA. (December 2008). States in Brief: Colorado. Substance abuse and mental health issues at-a-glance. A short report from the Office of Applied Studies. Washington, D.C. Available at http://www.samhsa.gov/statesinbrief/2009/COLORADO_508.pdf; Hughes, A. & Sathe, N. (2008). State estimates of substance use from the 2005-2006 National Surveys on Drug Use and Health (DHHS Publication No. SMA-08-4311, NSDUH Series H-33) Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

[86] Division of Behavioral Health, Office of Behavioral Health and Housing (November 2009). *Colorado Population in Need 2009*. (pages 10-11). Denver, CO: Colorado Department of Human Services. Available at http://www.cbhc.org/news/wp-content/uploads/2007/02/CO-PIN.pdf.

[87] Division of Behavioral Health, Office of Behavioral Health and Housing (November 2009). *Colorado Population in Need 2009*. Denver, CO: Colorado Department of Human Services. Available at http://www.cbhc.org/news/wp-content/uploads/2007/02/CO-PIN.pdf

[88] Ibid. Page 62. The penetration rate for children and youth was estimated to be 43 percent.

[89] *Arrestee Drug Abuse Monitoring Program (ADAM II), Quarter 1 2009 Report*, Denver City Jail, Male Arrestees. Data available from the Colorado Division of Criminal Justice. See Appendix B.

additional $768, on average, either through self-pay or insurance, or both. The total average client cost for services was $1,662 in fiscal year 2009.[90]

Time in treatment is short relative to the period of abuse

A single episode of treatment may be inadequate given the length of time the drug was abused. The average length of time in adult outpatient treatment in Colorado was about five months (half were in treatment for three months or less) although those with drug problems had, on average, been using the drug for years prior to referral: Alcohol, 15 years; marijuana, 7 years; cocaine, 10 years; methamphetamine, 8 years; heroin 4 years; and other opiates 6 years.[91] Those in intensive outpatient treatment had an average length of stay of 10 weeks; those in therapeutic communities stayed, on average, just over 18 months.

A single episode of treatment may be inadequate given the length of time the drug was abused. The average length of time in adult outpatient treatment in Colorado was about five months (half were in treatment for three months or less) although those with drug problems had, on average, been using the drug for years prior to referral: Alcohol, 15 years; marijuana, 7 years; cocaine, 10 years; methamphetamine, 8 years; heroin 4 years; and other opiates 6 years.

Types of drugs abused

Over the last 15 years, the proportion of individuals admitted to treatment in Colorado who mentioned problems associated with the use of alcohol, cocaine, or marijuana has remained relatively constant, as shown in Figure 2. However, clients mentioning methamphetamine increased from 2% in 1992 to 11% in 2006, the most recent year for which data are available. Over this same period, about 10-15% of those admitted to treatment mentioned problems with *both* alcohol and drugs.[92]

Alcohol use, while declining slightly in recent years, is mentioned at treatment admission by more than 4 out of 5 patients, as shown in Figure 2. Alcohol was mentioned by four times as frequently as marijuana, and nearly 8 times more frequently than cocaine and methamphetamine. The prevalence of alcohol use by patients admitted for behavioral health treatment in Colorado suggests the need for professionals to monitor alcohol consumption by those in treatment following convictions related to illegal drugs.

Federal Treatment Episode Data Set (TEDS) are presented in Figure 3 showing little change over time in the constellation of problems present at treatment admission. Alcohol-only admissions remain the largest proportion of substance cases even though these admissions have declined from 69 percent of all admissions in 1992, to 63 percent in 2006. Over the same period, drug-only admissions have increased from 7 percent in 1992, to 16 percent in 2006.[93] Much of this increase is likely due to methamphetamine, according to the information presented in Figure 2.

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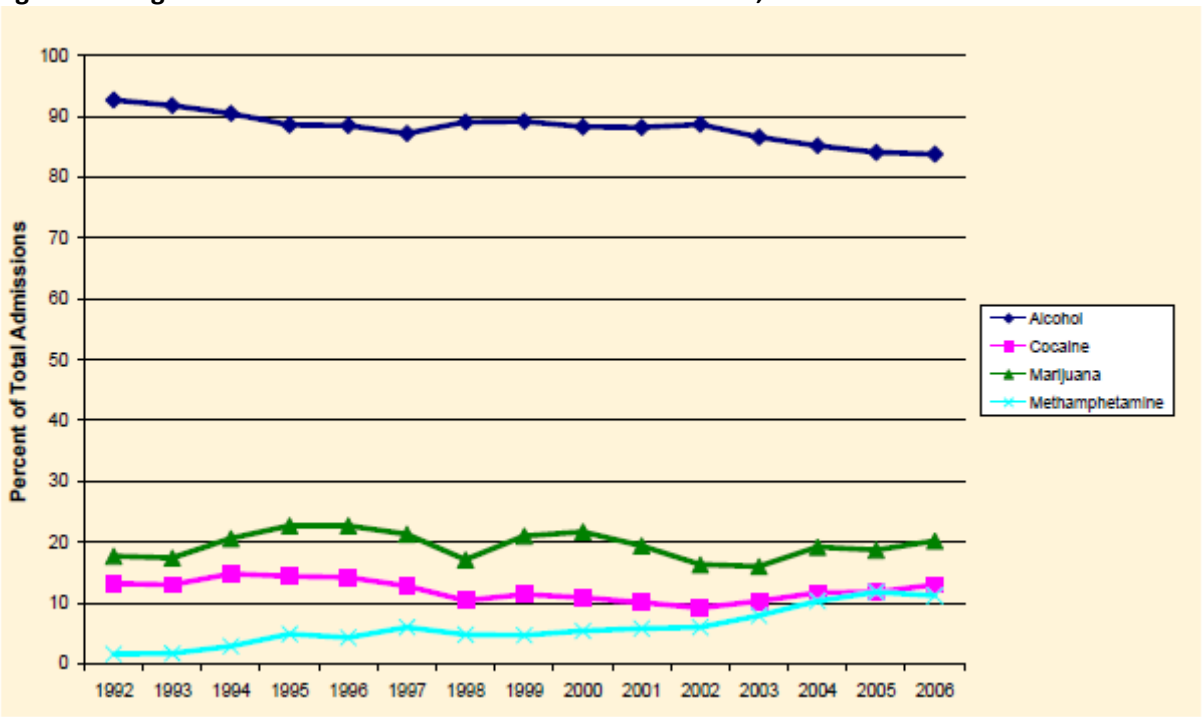
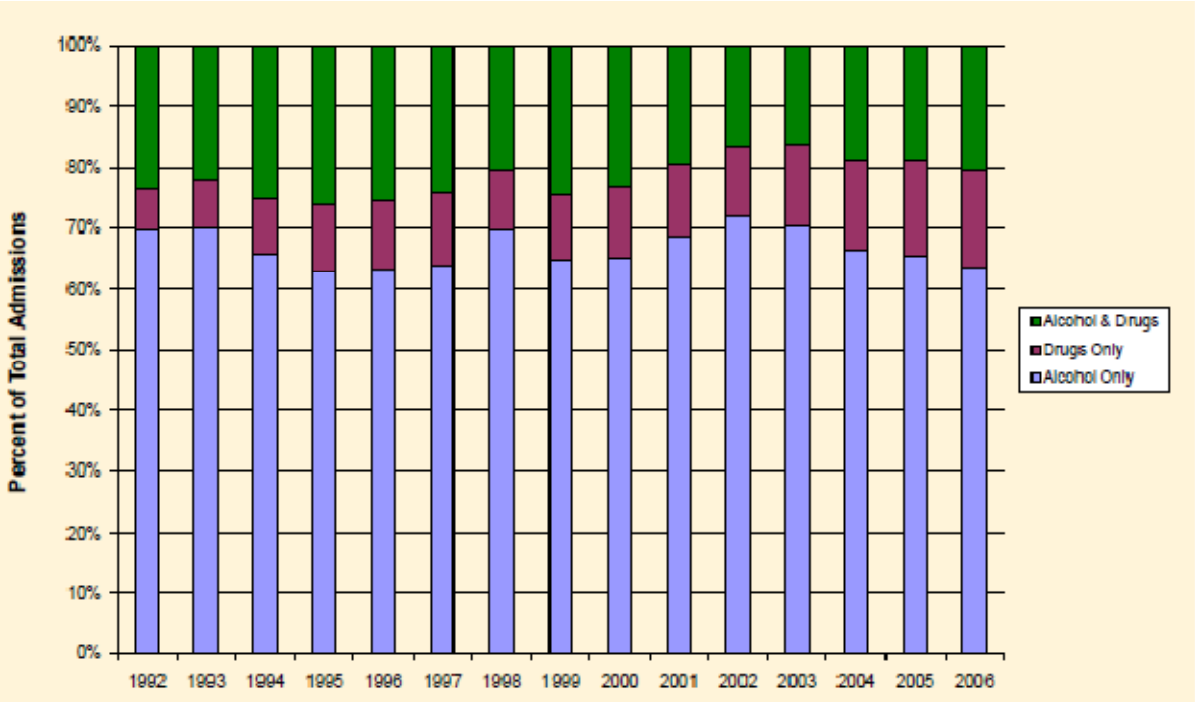
[90] Division of Behavioral Health. (October 31, 2009). *The costs and effectiveness of substance use disorder programs in the state of Colorado.* Report to the General Assembly, House and Senate Health and Human Services Committee. Denver, CO: Colorado Department of Human Services.
[91] Ibid. Pages 13 and 17.
[92] SAMHSA. (December 2008). *States in brief: Colorado. Substance abuse and mental health issues at-a-glance.* A short report from the Office of Applied Studies. Washington, D.C. Available at http://www.samhsa.gov/statesinbrief/2009/COLORADO_508.pdf.
[93] SAMHSA. (December 2008). *States in brief: Colorado. Substance abuse and mental health issues at-a-glance.* A short report from the Office of Applied Studies. Washington, D.C. Available at http://www.samhsa.gov/statesinbrief/2009/COLORADO_508.pdf.

Figure 2. Drugs mentioned at treatment admission in Colorado, 2008



Source: SAMHSA. (December 2008). States in brief: Colorado. Substance abuse and mental health issues at-a-glance. A short report from the Office of Applied Studies. Available at http://www.samhsa.gov/statesinbrief/2009/COLORADO_508.pdf.

Figure 3. Alcohol is the primary drug of abuse in Colorado: Treatment admissions, 2008



Source: SAMHSA. (December 2008). States in brief: Colorado. Substance abuse and mental health issues at-a-glance. A short report from the Office of Applied Studies. Available at http://www.samhsa.gov/statesinbrief/2009/COLORADO_508.pdf.

Both Figures 2 and 3 underscore the need for criminal justice and treatment professionals to monitor the use of alcohol by individuals in behavioral health treatment in Colorado. Alcohol use, alone or in combination with other drugs, far exceeds the frequency of use of drugs alone by individuals entering treatment in Colorado.

Individuals involved in Colorado's criminal justice system are many times more likely to need behavioral health treatment compared to the general population and their contact with the system may increase their exposure to services.

More detailed and recent data on illicit drug use is available from a study of 236 male arrestees booked into the Denver City jail in early 2009. Among the group that volunteered to participate in the study, 71% tested positive for any drug. The drugs include cocaine (27.2%), marijuana (47.0%), opiates (7.7%), oxycodone (1.2%) and methamphetamine (5.8%).[94] Nearly 21% tested positive for multiple drugs. Alcohol is not one of the substances tested in the study. See Appendix B (Quarter One, 2009 ADAM report) for more findings from this study.

Summary

Colorado has one of the highest illicit drug use prevalence rates in the nation, as illustrated by the graphic on the cover of this report. Men between the ages of 18 and 25 have the highest rates of behavioral health problems, and this is also the group most likely to become involved with the criminal justice system. National surveys of unmet treatment needs suggest that less than 10% of those in the general population who need treatment receive it. Individuals involved in the criminal justice system in Colorado are up many times more likely to need behavioral health treatment compared to the general population, and their contact with the system may increase their exposure to services. DBH-licensed facilities recorded 10,488 non-DUI clients in Colorado referred by the criminal justice system who terminated from treatment in FY 2009,[95] primarily from outpatient treatment; approximately 2,000 others received substance abuse or education treatment in prison.

Alcohol, marijuana, cocaine, opiates, and methamphetamine are the most commonly abused substances in Colorado generally, and most of those booked into jail are without health insurance that might assist in treatment costs. For many offenders in the community, substance abuse and addiction occur within a constellation of other critical issues, and the need for treatment services competes with basic survival needs such as affordable housing, transportation, employment, medication for other acute and chronic conditions. For substance abuse treatment to be successful, the National Institute on Drug Abuse promotes a comprehensive approach that addresses the entire collection of client needs.

For substance abuse treatment to be successful, the National Institute on Drug Abuse promotes a comprehensive approach that addresses the entire collection of client needs.

[94] National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. (2009). *Adam II Quarter 1 2009 Report.* Arrestee Drug Abuse Monitoring (ADAM) research study. Washington, DC. Report available from Colorado Division of Criminal Justice. The drug panel includes marijuana, cocaine, opiates, amphetamine EMIT test, PCP, Valium, Darvon, methadone, barbiturates and Oxycodone. The urine response rate was 88%; 373 individuals were sampled among 1,388 arrestees booked during the data collection period.

[95] Note that these are unique individuals. One individual may have participated in treatment multiple times.

SECTION THREE
THE SCIENCE OF ADDICTION AND RELAPSE, AND CRIMINAL JUSTICE POLICY

The need to know

Very high prevalence rates for substance use disorders and co-occurring disorders, the chronic (rather than acute) nature of the problems, and the corresponding need for a disease-management model of treatment, require that criminal justice professionals and policy makers to understand the new science of addiction. Successful treatment is multi-faceted process that often includes many interventions rather than a one-time strategy.[96] Understanding addiction as a chronic brain disease containing critical biological, behavioral, and social elements—all of which must be addressed--can improve decision making when the goal is to reduce recidivism and enhance public safety.

> *Very high prevalence rates for drug and alcohol abuse and addiction, co-occurring disorders, and the corresponding need for treatment, require that criminal justice professionals obtain a basic understanding of the science of addiction. This knowledge can improve decision making when the goal is to reduce recidivism and enhance public safety.*

This understanding is especially critical in light of the Commission's empirically-based recommendation that the state should integrate a public health perspective in its response to drug and alcohol addicted offenders. Promoting this understanding to improve decision making is one of the purposes of this paper. This basic knowledge is a fundamental requirement for anyone making decisions that affect individuals in the criminal justice system.

Drugs, brains, and behaviors

Many criminal justice professionals are not familiar with the relatively recent scientific advances that have greatly improved our understanding of addiction and, in fact, reversed traditional ideas about addiction. When science began to study addictive behavior in the 1930s, people addicted to drugs were thought to be morally flawed and lacking in willpower. Throughout much of the last century, then, scientists studying drug abuse promoted powerful myths and misconceptions about the nature of addiction. Those views shaped society's responses to drug abuse, treating it as a moral failing rather than a health problem.[97]

Today, according to the National Institute on Drug Abuse, *addiction is defined as a chronic, relapsing brain disease that is characterized by compulsive drug seeking and use, despite harmful consequences.* Addiction is a brain disease expressed in the form of compulsive behavior. It is this **compulsive craving** that overwhelms all other motivations that is the root cause of the massive health and social problems associated with drug addiction. The majority of the biomedical community considers addiction, in its essence, to be a

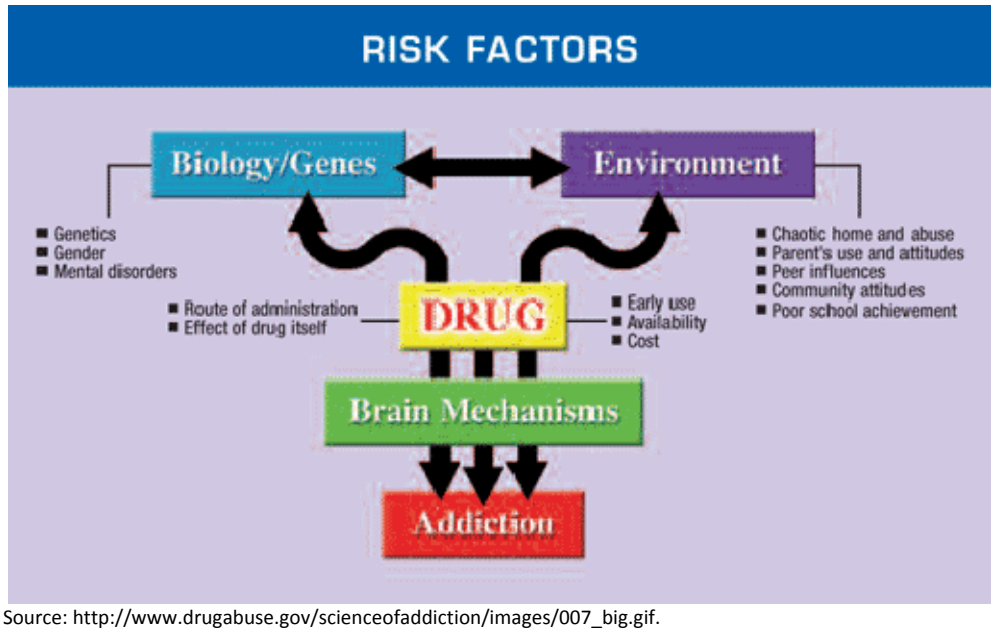
> *The majority of the biomedical community considers addiction, in its essence, to be a brain disease: a condition caused by persistent changes in brain structure and function. The Institutes of Medicine, the American Psychiatric Association, and the American Medical Association define addiction in these terms.*

[96] Dennis, M.L., Scott, C.K., Funk, R., & Foss, M.A.(2005). The duration and correlates of addiction and treatment careers. *Journal of Substance Abuse Treatment,* 28, 51-62.
[97] Leshner, A.I. (1999). Science-based views of drug addiction and its treatment. *Journal of the American Medical Association, 282*:1314-1316.

brain disease: a condition caused by persistent changes in brain structure and function. The Institutes of Medicine, the American Psychiatric Association, and the American Medical Association define addiction in these terms.[98]

Understanding that the disease of addiction can impair cognition is important when evidence-based treatment focuses on cognitive-behavioral interventions. Relapse is more likely when individuals are under stress (criminal justice system involvement is likely to increase stress levels), when concentration is severely diminished, and when the addiction has also resulted in serious sleep disorders. Research shows that medications may be critically important to many individuals in treatment, and criminal justice professionals may want to inquire about the availability and accessibility of medications offered by local treatment programs. Criminal justice clients may need considerable encouragement, positive support, and social structure in the early months of treatment.

Figure 4. Addiction is a complex interplay of many risk factors involving the environment and the brain



Source: http://www.drugabuse.gov/scienceofaddiction/images/007_big.gif.

Long-term drug abuse can disrupt the brain's frontal lobe which houses memory and cognition systems. These changes to the structure of the brain can distort environmental cues. For example, a billboard advertising liquor, or a memory of a drug abusing associate, can become coupled with the drug experience and can trigger uncontrollable cravings, even without the drug itself being available. This learned "reflex" is extremely robust and can emerge even after many years of abstinence. These changes to the brain's frontal lobe also mean that addiction can drive an abuser to seek out and take drugs compulsively. In the end, drug addiction erodes a person's self-control and ability to make sound decisions, while sending intense impulses to take drugs. According to Alan Leshner, M.D., former director of the National Institute on Drug Abuse:

[98] Institute of Medicine. (2006). *Improving the Quality of Health Care for Mental and Substance-Use Conditions*. Washington, D.C.: National Academy Press.

It is as if drugs have highjacked the brain's natural motivational control circuits, resulting in drug use becoming the sole, or at least the top, motivational priority for the individual. Thus, the majority of the biomedical community now considers addiction, in its essence, to be a brain disease: a condition caused by persistent changes in brain structure and function.[99]

A person's ability to benefit from early substance abuse treatment may suffer as a result of sleep deprivation that often follows early abstinence. Studies have found that poor sleep in the first two weeks of treatment predicts failure 5 months after treatment.

At the core of understanding the dynamics of addiction is this: The changes to the brain affect cognitive functioning. Scientists have observed that drugs induce changes in brain cells similar to those underlying normal learning. These adaptations result in a modification of the brain's neural circuitry—the interconnected networks of neurons responsible for behavioral, cognitive, emotional, and motivational processes. A few examples of the broad and complex problems associated with addiction as a brain disease are provided below.

Ability to focus. Methamphetamine abuse profoundly disrupts an addict's ability to ignore distractions. Researchers at the University of California, Davis and Stanford University found that methamphetamine abusers were able to switch attention from one task to another, but they exhibited significant deficits in the ability to pay attention to a specific task. This cognitive deficit undermines effective engagement in cognitive-behavioral therapy and so undermines recovery from methamphetamine addiction.[100] However, long-term methamphetamine abusers who abstain from the drug for more than a year show signs of structural and functional recovery of nerve cells in a brain region associated with emotion and cognition. Patterns reflecting healthy brain activity, as measured by brain-imaging techniques, increased with the duration of abstinence.[101]

Stress. Research shows that the physiological stress reaction persists much longer in cocaine addicts than would be expected, even after weeks of abstinence. This suggests that stress may present a particularly important vulnerability,[102] and this has implications for criminal justice professionals who are often aware of situations that may pose particular threats to an individual's recovery such as loss of support from family or friends, encountering friends or associates still involved in drugs or crime, and a return to an environment associated with prior drug use. The latter can trigger strong and, for those who have not benefitted from treatment, uncontrollable cravings.

Sleep. A host of psychological problems face those in recovery. For example, sleep researchers at the Yale and Harvard Schools of Medicine found evidence of insomnia, with learning and attention deficits, in the weeks following abstinence. The researchers believe cocaine may impair the brain's ability to gauge its own need for sleep. A person's ability to benefit from early treatment for substance use disorders may suffer as a result of sleep deprivation that often follows early abstinence. Studies have

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[99] Leshner, A.I. (2001). Addiction is a brain disease. *Issues in Science and Technology, On-line*. Dallas, TX: National Academy of Sciences, National Academy of Engineering, Institutes of Medicine, University of Texas. Also available at http://www.issues.org/17.3/leshner.htm and as Appendix A of this paper.

[100] For a summary of the paper published in *Biological Psychiatry*, go to http://archives.drugabuse.gov/NIDA_notes/NNvol20N5/Highlights.html.

[101] For a summary of the paper published in *Archives of General Psychiatry,* go to http://archives.drugabuse.gov/NIDA_notes/NNvol20N4/Highlights.html

[102] Sinha, R. (2003). Hypothalamic-pituitary-adrenal axis and sympatho-adreno-medullary responses during stress-induced and drug cue-induced cocaine craving states. *Psychopharmacology 170*(1):62-72.

found that poor sleep in the first two weeks of treatment predicts failure 5 months after treatment.[103] This suggests the need for therapists to address sleep disorders early in therapy, perhaps with the use of medications or behavioral treatments.[104] Further, problems in memory and attention that may be linked to poor sleep are also linked with increased treatment dropout and likely affect individuals' ability to 'take in' lessons from drug abuse counseling.

Addiction and mental illness involve similar regions of the brain. Given the rate of comorbidity between drug use disorders and other mental illnesses (See Figure 1), NIDA calls for a comprehensive approach to assessment and treatment that that identifies and evaluates both conditions.

Genes. The National Institute on Drug Abuse (NIDA) estimates that genetic factors account for between 40 and 60 percent of a person's vulnerability to addiction, including the effects of the environment on gene expression and function. Common genetic factors may make a person susceptible to both addiction and other mental disorders or genetic factors may put an individual at greater risk of a second disorder once the first appears.

Mental illness. Individuals with mental disorders are at greater risk of substance use disorders than the general population. Stress, trauma (including physical or sexual abuse), and early exposure to drugs are common factors that can lead to addiction and other mental illnesses. Addiction and mental illness involve similar regions of the brain. Given the rate of comorbidity between substance use disorders and other mental illnesses (See Figure 1), NIDA calls for a comprehensive approach to assessment and treatment that that identifies and evaluates both conditions.

Women and alcohol. Starting with adolescence, women appear to be more susceptible to the toxic effects of alcohol or its metabolites on the nervous system and more vulnerable to alcohol-induced brain damage than men. Research has found that adult and adolescent women who are alcohol dependent experience greater declines in cognitive and motor function than men despite less alcohol consumption, shorter history of overall use, and shorter duration of alcohol dependence. In comparison with men who are alcohol dependent and female controls (women who are not dependent on alcohol), women who are alcohol dependent exhibit deterioration in planning, working memory, and psychomotor speed. They also show brain abnormalities and shrinkage after a shorter drinking history and lower peak consumption than men.

Further, women frequently present both in court and at the treatment center, with child care, custody, and parenting issues.[105] These concerns must be consistently addressed to reduce recidivism. Additionally, substance abuse and victimization appear to be highly correlated; drug abuse increases the risk of violent assault, and victimization appears to increase the risk of substance abuse. These events are traumatic and require attention when recidivism reduction is the goal.

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[103] Cocaine abusers' cognitive deficits have been well documented. The drug constricts cerebral blood vessels, resulting in decreased blood flow to the brain. Magnetic resonance imaging (MRI) studies also reveal an increased presence of micro vascular lesions and clots in cerebral blood vessels, which can also restrict blood flow. Chronic cocaine use can also deplete the neurotransmitter dopamine, which contributes to impaired cognition. See Mann, A. (2004). Cocaine Abusers' Cognitive Deficits Compromise Treatment Outcomes, *NIDA Notes, 19* (1).

[104] Morgan, P.T. (2006). Sleep, sleep-dependent procedural learning and vigilance in chronic cocaine users: Evidence for occult insomnia. *Drug and Alcohol Dependence,* 82(3): 238-249.

[105] Center for Substance Abuse Treatment. (2009). *Substance Abuse Treatment: Addressing the Specific Needs of Women.* Treatment Improvement Protocol (TIP) Series 51. HHS Publication No. (SMA) 09-4426. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Trauma. Traumatic experiences are not uncommon among those with substance use disorders or mental illness. Symptoms include persistent re-experiencing of trauma-related events, depression, heightened states of arousal, sleep disturbances including nightmares, trouble falling asleep, and frequent awakenings. Some studies have found women with histories of sexual assault frequently have substance use disorders. This leads to difficulty managing anxiety, feelings of overwhelming emotion and terror, feelings of being out-of-control and incompetent, and isolation and profound loneliness.[106]

These are just a few examples of the complexities involved in the serious behavioral health problems of the majority of individuals involved in the criminal justice system. Understanding these issues as risk factors for relapse and further problems provide direction for court personnel, supervising officers and, of course, treatment providers. For example, an offender's inability to concentrate, lack of sleep, trauma history, and exceptional stress suggest the need for professionals to do the following:

- repeat verbally and write down information and instructions for offenders
- speak slowly and carefully
- help set priorities
- break tasks into small sequences
- provide positive and reassuring support for the person who may have a variety of very difficult physical and psychological conditions
    - create a sense of safety
    - increase coping strategies
    - normalize the symptoms
    - provide encouragement

Professionals working directly with offenders should routinely inquire about stress, sleep, anxiety, and concentration levels to better assess immediate risk for relapse and to provide appropriate support and additional services when necessary. Helping offenders marshal their abilities and resources, and communicating an optimistic expectation that change will occur, will contribute to a positive treatment outcome.

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Professionals working directly with offenders should routinely inquire about stress, sleep, anxiety, and concentration levels to better assess immediate risk for relapse and to provide appropriate support and additional services when necessary. Helping offenders marshal their abilities and resources, and communicating an optimistic expectation that change will occur, will contribute to a positive treatment outcome.

In sum, addiction is considered a brain disease because drugs change the brain's structure and how it works. These changes can be long lasting, and can lead to the harmful behaviors seen in people who abuse drugs. While the initial decision to take drugs is usually voluntary, when drug abuse takes over, a person's ability to exert self control can

[106] Ibid.

become seriously impaired. Brain imaging studies show physical changes in areas of the brain that are critical to judgment, decision making, learning and memory, and behavior control.[107] Scientists believe that these changes alter the way the brain works, and may help explain the compulsive and destructive behaviors of addiction.

Relapse potential

The traditional acute care approach to behavioral health problems has encouraged the idea that those entering treatment should be cured and able to maintain lifelong abstinence following a single episode of specialized treatment.[108] Client progress in early recovery is often marked by episodes of perceived stress, resumed drug use or full-blown relapse, and multiple treatment admissions. Too often treatment episodes are brief, sometimes lasting only a few weeks, based on the notion that a client who enters and completes a single episode of care should then be able to maintain abstinence and continue the recovery process independently. Although some individuals can successfully recover within this framework, more than half the clients entering substance abuse treatment today require multiple episodes of care over several years to achieve and sustain recovery. Retrospective and prospective treatment studies report that most participants initiate three to four episodes of treatment over multiple years before reaching a stable state of abstinence.[109]

Table 2. Treatment outcome by type of placement, non-DUI offenders, FY 2009[110]

Treatment level	% treatment completed at this facility, no further treatment recommended	% completed, further treatment recommended	Treatment not completed at this facility	Left against professional advice, dropped out, incarcerated, terminated by facility	% of total
Traditional outpatient	41.1% (2320)	3.9% (222)	12.5% (702)	42.5% (2396)	**73.1% (5640)**
Intensive Residential, IRT	11.9 (84)	70.9 (500)	4.4 (31)	12.8 (90)	**9.1 (705)**
Intensive outpatient	23.5 (106)	18.8 (85)	11.9 (54)	45.8 (207)	**5.8 (452)**
STIRRT (14 day residential)	0.5 (2)	92.8 (361)	0.3 (1)	6.4 (25)	**5.0 (389)**
Therapeutic community	2.3 (9)	6.2 (24)	54.2 (211)	21.9 (85)	**4.3 (329)**
Transitional residential	30.0 (57)	23.7 (45)	1.6 (3)	44.7 (85)	**2.5 (190)**
Day treatment	0.0 (0)	35.7 (5)	35.7 (5)	28.6 (4)	**0.2 (14)**
Total	33.4 (2578)	16.1 (1242)	13.2 (1007)	37.5 (2892)	**100.0 (7719)**

Source: Division of Behavioral Health; treatment discharges. Excludes the following DBH categories: differential assessment only, died and other.

[107] Fowler, J.S., Volkow, N.D., Kassed, C.A., & Chang, L. (2007). Imaging the addicted human brain. *Science Practice Perspective 3*(2), 4-16.
[108] Excerpts from: Mark Stanford, Director of Medical and Clinical Services, Department of Alcohol & Drug Services, Addiction Medicine Division, Santa Clara County Health & Hospital System, reviewing the literature in an editorial in the San Jose *Mercury News*, December 29, 2008.
[109] Dennis, M.L., Scott, C.K., Funk, R., & Foss, M.A. (2005). The duration and correlates of addiction and treatment careers. *Journal of Substance Abuse Treatment,* 28, 51-62.
[110] Thanks to Kristen Dixion, research analyst at the Division of Behavioral Health, for conducting additional analyses at the request of the author.

Table 2 shows that treatment outcomes in Colorado for non-DUI offenders mirror the outcomes reported in the larger treatment literature. Traditional outpatient services (top row of data) were provided for 73.1% of the group and 42.5% had a negative outcome that was likely related to relapse or new criminal behavior, or both. The fourth column of data in the table shows the propensity for negative treatment outcomes across program placements. One-third (33.4%) completed treatment with staff recommending no further intervention; another 16.1% completed treatment with staff recommending additional services, totaling 49.5% that completed non-DUI substance use disordered treatment (bottom row).[111] The table clearly shows that many offenders in non-DUI treatment need continuing or additional treatment episodes, and suggests that relapse is relatively common.

Research shows that certain groups of individuals may be more vulnerable to relapse. These include those with eating disorders, recurrent depression, substance use disorders, and those diagnosed with personality disorders (including antisocial personality disorder).[112] Those who relapse require additional or extended treatment, according to experts. Despite the likelihood of relapse, research shows the durability of treatment gains, and this often occurs despite the type of therapeutic intervention. While much corrections research supports cognitive behavior therapy for addressing criminogenic, antisocial attitudes and behaviors, the larger therapy literature concludes that 40% of the improvement in clients is attributable to client variables and non-therapy variables.

> *When clients come to [treatment], they enter with a diverse array of disorders, histories, current stressors, social support networks, and the like…It is reasonable to conclude that the nature of some problems (e.g., personality disorders, schizophrenia) and the makeup of some clients (e.g., severe abuse in child, interpersonal distrust) affect therapy outcome….The data suggest that some client variables can change rapidly in psychotherapy (e.g., motivation and expectations for improvement), whereas other client variables are more likely to be immutable in the short run (e.g., personality styles).*[113]

Empirical findings suggest that approximately 30% of client improvement can be linked to the role of the therapeutic relationship. Core conditions that research found linked to progress in treatment included the client's perception that accurate empathy, positive regard, and genuineness or congruence.[114] This information is important because new research is showing that the relationship between the offender and those in authority is linked with later recidivism, and the qualities identified in the general treatment literature and mentioned above are the same variables studied by researchers .[115] Since non-therapy variables have been found to significantly contribute to treatment success, individuals working in the justice system can contribute to each client's efforts: "Relapse can be reduced by encouraging and reinforcing the clients' belief in their ability to cope with the inevitable, temporary setbacks likely to be experienced" during and after treatment.[116]

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[111] Data are unavailable that would measure the extent to which individuals were engaged in the treatment process.
[112] Asay, T.P. & Lambert, M.J. (2001). The empirical case for the Common Factors in Therapy: Quantitative findings. In Hubble, M. A., Duncan, B.L., & Miller, S.D. (Eds.), *The Heart and Soul of Change: What works in therapy.* pp.33-55 Washington, DC: American Psychological Association.
[113] Ibid, page 31-32.
[114] Ibid, summarizing the literature on what works in therapy.
[115] Skeem, J., Manchak, S., & Peterson, J. (2010 online). Correctional policy for offenders with mental disorder: Creating a new paradigm for recidivism reduction. *Law and Human Behavior;* Skeem, J., Eno Louden, J., Polasheck, & Cap, J. (2007). Relationship quality in mandated treatment: Blending care with control. Psychological Assessment, 19, 397-410; Skeem, J., & Manchak, S. (2008). Back to the future: From Klockars' model of effective supervision to evidence-based practice in probation. *International Journal of Offender Rehabilitation, 47*, 220-247.
[116] Page 42-43. Asay, T.P. and Lambert, M.J. (2001). The empirical case for the Common Factors in Therapy: Quantitative findings. In Hubble, M. A., Duncan, B.L., & Miller, S.D. (Eds.), *The heart and soul of change: What works in therapy. (*pages 33-55). Washington, DC: American Psychological Association.

How should criminal justice professionals respond to relapse?

While criminal justice professionals must also use risk assessment instruments to ensure that public safety measures are in place for those who threaten others, even individuals who are incarcerated should be offered treatment to reduce the potential for disease-related recidivism upon release.

Both developing and recovering from addiction depend on biology, behavior, and social context. The challenge for policy makers and professionals in the criminal justice system—including correctional facility medical staff—is to understand that individuals suffering from the disease of addiction must be treated as they would be for any other health condition. Not only must the underlying brain disease be treated, but the behavioral and social elements must also be addressed, as it is done with other brain diseases including stroke, schizophrenia, and Alzheimer's disease.[117] While criminal justice professionals must also use risk assessment instruments to ensure that public safety measures are in place for those who threaten others, even individuals who are incarcerated should be offered treatment to reduce the potential for disease-related recidivism upon release.

Relapse is best understood in the context of chronic disease. Chronic diseases share the following characteristics:

1. Recovery is protracted and frequently requires multiple episodes of treatment,
2. Relapse can occur during or after successful treatment episodes, and
3. Participation in self-help support groups during and after treatment can be helpful in sustaining long-term recovery.[118]

Many organizations, including the National Center for Addiction and Substance Abuse at Columbia University and the National Institute on Drug Abuse, promote treating addiction like a chronic disease and recognizing that recovery often includes relapse and more than one episode of intensive treatment.[119] In addition, NIDA identifies stress as a frequent contributing factor to relapse,[120] specifically noting that offenders reentering the community from jail or prison "face many challenges and stressors, including reuniting with family members, securing safe housing, and complying with criminal justice supervision requirements."[121]

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[117] Excerpts from: Mark Stanford, Director of Medical and Clinical Services, Department of Alcohol & Drug Services, Addiction Medicine Division, Santa Clara County Health & Hospital System, reviewing the literature in an editorial in the San Jose *Mercury News,* December 29, 2008.
[118] NIDA PowerPoint slideshow, *Addiction: It's a Brain Disease Beyond a Reasonable Doubt.* See http://www.nida.nih.gov/drugpages/cj.html.
[119] The National Center on Addiction and Substance Abuse. (February 2010). *Behind bars II: Substance abuse and America's prison population. (*page 76). New York, NY: Columbia University. See also McLellan, A.T., Lewis, D.C., O'Brien, C.P., & Kleber, H.D. (2000). Drug dependence, a chronic medical illness: implications for treatment, insurance, and outcomes evaluation. *Journal of the American Medical Association, 284*:1689-1695.
[120] Sinha, R. (2003). Hypothalamic-pituitary-adrenal axis and sympatho-adreno-medullary responses during stress-induced and drug cue-induced cocaine craving states. *Psychopharmacology 170*:62-72.
[121] Kelly, J.F. Finney, J.W. & Moos, R. (2006). Substance use disorder patients who are mandated to treatment: Characteristics, treatment process, and 1- and 5-year outcomes. *Journal of Substance Abuse Treatment 28*:213-223. See also National Institute of Health (n.d.). *Principles of Drug Abuse Treatment for Criminal Justice Populations: A Research-Based Guide.* (page 18). U.S. Department of Health and Human Services.

Role of justice system

Managing addiction and mental illness increases public safety. While violent and threatening behavior by those with behavioral health problems must be addressed immediately, incarceration alone without treatment will not increase public safety in the long term. Without treatment, most individuals will return to the community with the same serious problems that were associated with their criminal behavior in the first place.

Managing addiction and mental illness increases public safety. While violent and threatening behavior by those with behavioral health problems must be addressed immediately, incarceration alone without treatment will not increase public safety in the long term.

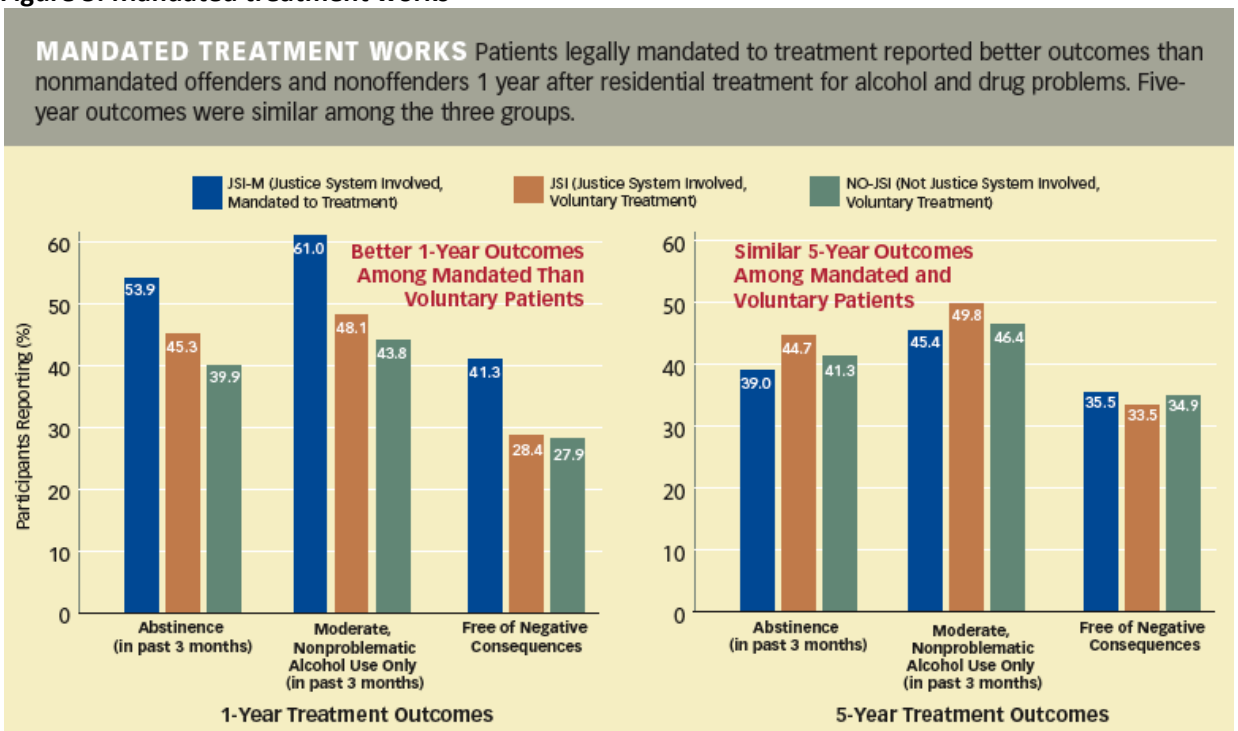
The criminal justice system can provide important legal leverage to encourage treatment participation. Individuals under legal mandates to participate in treatment have higher attendance rates and tend to remain in treatment for longer periods, increasing the likelihood of positive outcomes (see Figure 5).[122] Further, the justice system can assist the behavioral health system in a vital way. Behavioral health treatment suffers from attrition: individuals (those with criminal records and those without) frequently drop out of treatment programs. The legal mandate to participate in treatment provides strong motivation, facilitating the treatment process.

The criminal justice system can provide important legal leverage to encourage treatment participation. Individuals under legal mandates to participate in treatment have higher attendance rates and tend to remain in treatment for longer periods, increasing the likelihood of positive outcomes.

Other behavior problems, such as a positive urinalysis test, should be reviewed in the context of the offender's total life circumstances. Continuing or re-emerging drug use is frequently part of the recovery process but requires a clinical response—NIDA recommends either increasing the intensity of treatment or changing the treatment intervention.

[122] Perron, B.E. & Bright, C.L. (2008). The influence of legal coercion on dropout from substance abuse treatment: Results from a national survey. Drug and Alcohol Dependence 92:123-131; Daughters, S.B., Stipelman, B.A., Sargeant, M.S., Schuster, R., Bornovalova, M.A. & Lejuez, C.W. (2008). Effects of antisocial personality disorder and court-mandated status on substance abuse treatment dropout. Journal of Substance Abuse Treatment, 157-164; Kelly, J.F., Finney, J.W. & Moos, R. (2005). Substance use disorder patients who are mandated to treatment: Characteristics, treatment process, and 1- and 5-year outcomes. Journal of Substance Abuse Treatment 28, 213-223.

Figure 5. Mandated treatment works



Source: Kelly, J.F. Finney, J.W., & Moos, R. (2006). Substance use disorder patients who are mandated to treatment: Characteristics, treatment process, and 1- and 5-year outcomes. *Journal of Substance Abuse Treatment 28*:213-223. Summarized at http://archives.drugabuse.gov/NIDA_notes/NNvol20N6/Court.html.

Accountability, sanctions and incentives

Positive incentives can be used to promote a healthy, pro-social lifestyle. Research has shown that using rewards to recognize progress is the most effective way to change behavior. Rewards can take many forms, including certificates of achievement or verbal praise from an authority figure such as a judge. Establishing an attitude of "catching people doing things right" creates a positive environment for fostering and maintaining behavior change.[123]

At the same time, individuals must be held accountable through the justice system for criminal behavior linked to alcohol and other drug abuse.[124] Research has found that the likelihood that a supervised offender will engage in substance use or illegal activity is influenced by the perceived certainty of detection, the recognition of accomplishments, the certainty of the officer's response, and the anticipated magnitude of the sanctions and rewards.[125] Evidence-based practices include the *immediate* use of graduated, structured and incremental punishments for noncompliant behavior, such as one day in jail, more frequent substance testing, and imposition of a curfew. Sanctions should increase in

[123] Petry, N.M. (2005). Effect of prize-based incentives on outcomes in stimulant abusers in outpatient psychosocial treatment programs: A National Drug Abuse Treatment Clinical Trials Network Study. *Archives of General Psychiatry 62(*10),1148-1156.
[124] National Center on Addiction and Substance Abuse. (February 2010*). Behind Bars II: Substance abuse and America's prison population.* (page 76). Columbia University.
[125] National Center on Addiction and Substance Abuse. (February 2010*). Behind Bars II: Substance abuse and America's prison population.* (page 67). New York, NY: Columbia University.; Marlowe, D.B., Festinger, D.S., Foltz, C. Lee, P.A. & Patapis, N.S. (2005). Perceived deterrence and outcomes in drug court. *Behavioral Sciences and the Law, 23*, 183-198.

severity as the behavior escalates and be linked to the over-all risk of the offender.[126] The assignment of less punitive responses for early and less serious non-compliance and increasingly harsher sanctions for more serious or persistent problems is most effective when implemented in conjunction with substance testing, according to the National Institute on Drug Abuse.[127] This recommended approach is the use of modest steps to deter future violations.[128]

Consistent, predictable, and fair. When sanctions are used, research shows that it is important for offenders to perceive them as consistent, predictable, and fair. Most importantly, according to the National Institute on Drug Abuse, treatment itself should be seen not as a sanction, nor should it be viewed as a negotiable aspect of a plea bargain but as a community service designed to help the offender build a meaningful and productive life.

Traditional criminal justice system policies and practices do not accommodate relapse as part of the recovery process. Critical next steps include education, training and collaboration among professions to develop new policies and protocols that move current practices away from a traditional, sanctions-only approach to an integrated case management approach for individuals with chronic behavioral health problems. This approach also requires risk assessment and management to ensure public safety.

The criminal justice response to relapse

Because addiction is a chronic disease, recovery is likely to involve relapse and require multiple episodes of intensive treatment.[129] Further, individuals are more likely to fail if the level of treatment intensity does not correspond to the individual offender's level of need. Relapse is the crux of the public safety dilemma for criminal justice professionals:

> *Even a few days in jail, out of the structured and supportive environments provided in community-based treatment programs, can disrupt the recovery process. If probationers go to jail they may lose jobs or housing they gained during the recovery process and cause new or renewed relationships to break down. These repercussions may counteract some of the positive effects of treatment, potentially slowing the recovery process.*[130]

Too often, traditional criminal justice system policies and practices do not accommodate relapse as part of the recovery process.[131] Critical next steps include education, training and collaboration among professions to develop new policies and protocols that move current practices away from a traditional, sanctions-only approach to an integrated case management approach for individuals with chronic behavioral health problems. The National Institute on Drug Abuse states that outcomes for substance

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[126] National Center on Addiction and Substance Abuse. (February 2010*). Behind Bars II: Substance abuse and America's prison population.* (page 66). New York, NY: Columbia University; Taxman, F.S., Soule, D., & Gelb, A. (1999). Graduated sanctions: Stepping into accountable systems and offenders. *Prison Journal, 79*, 182-204.

[127] National Institute on Drug Abuse (1999, rev. 2009). *Principles of drug addiction treatment: A research-based guide.* U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse, Rockville, MD.

[128] National Center on Addiction and Substance Abuse. (February 2010*). Behind Bars II: Substance abuse and America's prison population.* (page 66). New York, NY: Columbia University.

[129] McLellan, A.T., Lewis, D.C., O'Brien, C.P. & Klebar, H.D. (2000). Drug dependence, a chronic medical illness: Implications for treatment, Insurance, and outcomes evaluation. *Journal of the American Medical Association, 284*, 1689-1696.

[130] National Center on Addiction and Substance Abuse. (February 2010*). Behind Bars II: Substance abuse and America's prison population.* (page 76). New York, NY: Columbia University.; McVay, D., Schiraldi, V., & Ziedenberg, J. (2004). *Treatment or Incarceration: National and state findings on the efficacy and cost savings of drug treatment versus imprisonment.* Washington, D.C.: Justice Policy Institute.

[131] An exception may be the use of drug courts. Begun 20 years ago in Dade County, FL, drug courts remain nontraditional. In Colorado, on July 1, 2010, there were 20 adult drug courts, 10 juvenile drug courts, 2 adult mental health courts, and 1 juvenile mental health court. (Shane Bahr, specialty court coordinator for the Colorado Judicial Department, personal communication July 2010).

abusing individuals can be improved by cross-agency coordination and collaboration of criminal justice professionals, substance use disorder treatment providers, and other social service agencies. By working together, the criminal justice and treatment systems can optimize resources to benefit the health, safety, and well-being of individuals and the communities they serve. Drug courts epitomize this type of response, and multiple studies have documented their effectiveness.[132]

Summary

Research shows that drug treatment reduced drug use and criminal activity during and after treatment. The science of addiction and relapse makes it clear that the first tenet of evidence-based correctional practices—individualized assessment, case management and treatment—is a primary, not secondary or tertiary, aspect of public safety. It is only by understanding and proactively addressing the complex interplay of social, psychological, and physical aspects of addiction and mental illness of those involved in the criminal justice system that the "revolving door" and "frequent flyers" and other euphemisms for recidivism can be improved, enhancing community safety. Seeking to learn the social circumstances and risk factors of individual offenders--about cognitive decline, sleeplessness and stress—and adjusting interventions based on knowledge of the offender and the chronicity of addiction and mental illness will reduce recidivism and improve the health of our communities. Relapse requires adjusting the treatment intervention and using the nature of the criminal justice system to leverage compliance with treatment requirements. Offenders assessed as violent and threatening must be immediately managed with the understanding that incarceration alone will not improve behavioral health problems, and public safety is not enhanced if these individuals are released without treatment. Lack of data in Colorado precludes our ability to better understand the extent to which individual need levels are matched with appropriate levels of treatment. Poor needs/treatment matching increases the likelihood of relapse and recidivism.

[132] A meta-analysis of 24 drug court studies was conducted; the U.S. Government Accountability Office (2005) reviewed 27 drug court evaluations in 2005; California's Judicial Council (2003) studied drug courts in 17 counties and found $43M in averted incarceration costs. MacKenzie, D.L. (2006). *What works in corrections: Reducing the criminal activities of offenders and delinquents.* New York, NY: Cambridge University Press. See Przybylski (2008) http://dcj.state.co.us/ors/pdf/docs/WW08_022808.pdf at for a review.

SECTION FOUR
TREATMENT OUTCOMES

Is "treatment" a misnomer?

Experts question the use of the word "treatment" as applied to addiction because it implies a one-time strategy to eliminate the adverse effects of a specific condition. However, like other chronic conditions such as heart disease or diabetes, treatment of addiction actually refers to an extended process of diagnosis, treatment of acute symptoms, identification and management of circumstances that initially may have promoted the alcohol and/or drug use, and the development of life-long strategies to minimize the likelihood of ongoing use and its accompanying consequences. In this context, treatment is more realistically defined as a continuum of different types and intensities of services over a long period of time. Some consider a more accurate definition of treatment to be *sustained care recovery management,* referring to the structured process of accessing and completing a range of services on the road to health and self-sufficiency.[133]

Experts question the use of the word "treatment" as applied to addiction because it implies a one-time strategy to eliminate the adverse effects of a specific condition. However, like other chronic conditions such as heart disease or diabetes, treatment of addiction actually refers to an extended process of diagnosis, treatment of acute symptoms, identification and management of circumstances that initially may have promoted the alcohol and/or drug use, and the development of life-long strategies to minimize the likelihood of ongoing use and its accompanying consequences.

Multiple problems of offenders

Criminal justice professionals usually see the highest risk individuals with multiple problems. As discussed in Section Two, many individuals involved in the criminal justice system have substance use disorders, many have mental health problems, and many are unemployed, lack housing or transportation, live in poverty, or have family problems. It is not uncommon for these individuals to be court-ordered into substance use disorder treatment, where they become part of the behavioral health system.

A 2009 study by the Division of Behavioral Health (DBH) reveals the constellation of problems associated with criminal justice involved individuals. The DBH study found that 44% of its substance abuse clients were assessed at admission as having a current mental health issue.[134] This group with co-occurring substance use and mental health disorders is large and particularly challenged in terms of recovery. The DBH study analyzed individuals discharged from treatment programs in FY 2008 and compared clients with co-occurring disorders with those without co-occurring disorders and found that the former group was more likely to have the following characteristics:

[133] Excerpts from: Mark Stanford, Director of Medical and Clinical Services, Department of Alcohol & Drug Services, Addiction Medicine Division, Santa Clara County Health & Hospital System, reviewing the literature in an editorial in the San Jose *Mercury News*, December 29, 2008.
[134] Division of Behavioral Health. (October 31, 2009). *The costs and effectiveness of substance use disorder programs in the state of Colorado.* (page 23). Report to the General Assembly, House and Senate Health and Human Services Committee. Denver, CO: Colorado Department of Human Services.

- Referred to treatment by the criminal justice system,
- Had prior treatment episodes,
- Prior placement in more intensive treatment modalities,
- Had moderate to severe problems with family, socialization, work or school,
- Had been admitted to psychiatric and medical hospitals, and
- Were less likely to have completed treatment without additional treatment recommendations.[135]

The science of addiction suggests that recovery is both difficult and complicated. A prerequisite to successful treatment is the delivery of appropriate services at the appropriate to meet the offender's dynamic levels of need and risk. Many experts believe that the lack of comprehensive treatment, matched to the offender's specific level of treatment need, may account for poor treatment outcomes.

This study validates the experience of many criminal justice professionals: The individuals they see have multiple problems and, very often, the professional has encountered the person before, from a prior criminal episode(s). These "frequent flyers," as they are sometimes called, lead the criminal justice practitioner to question the efficacy of treatment and the commitment of the offender to control their addictive behaviors.

The science of addiction suggests that recovery is both difficult and complicated. A prerequisite to successful treatment is the delivery of appropriate services at the appropriate to meet the offender's dynamic levels of need and risk. Many experts believe that the lack of comprehensive treatment, matched to the offender's specific level of treatment need, may account for poor treatment outcomes. Lack of detailed information about the service need required and the services delivered preclude tracking this potential gap in service.

Recovery, relapse, and treatment efficacy

People in recovery must learn ways to make and maintain healthy changes. In cognitive behavioral therapy (CBT), clinicians help individuals learn techniques to avoid or navigate safely through experiences that evoke powerful urges to consume drugs: stressful situations and the people, places, and things that the person associates with past drug-taking experiences. Unfortunately, the ability of many addicts to learn these recovery lessons is actually impaired. Researchers have found that clients with impaired attention, learning, memory, reaction time, and cognitive flexibility - all documented consequences of chronic cocaine abuse, for example - were much more likely to drop out of a 12-week CBT program than those not cognitively impaired.[136] Combine these deficits with the psychological effects of extraordinary stress and the symptoms of mental illness and it becomes clearer why many offenders require multiple episodes of treatment.

[135] Division of Behavioral Health. (October 31, 2009). *The costs and effectiveness of substance use disorder programs in the state of Colorado. (page 34).* Report to the General Assembly, House and Senate Health and Human Services Committee. Denver, CO: Colorado Department of Human Services.

[136] Aharonovich, E. (2003). Cognitive impairment, retention and abstinence among cocaine abusers in cognitive-behavioral treatment. *Drug and Alcohol Dependence 71(*2), 207-211.

In fact, experts estimate that nearly 80% of those entering treatment with substance use disorders present with one or more co-occurring psychiatric disorder. Those with co-occurring mental health problems are associated with higher substance use severity, more intensive level of care placements, lower treatment participation, and worse outcomes. This suggests that there may be a need for separate treatment tracks that focus more on subgroups with these characteristics. The finding that substance use is a chronic condition, where multiple treatment admissions over many years is the norm, suggest a need for multiple episodes of care for longer time periods.[137]

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PRINCIPLES OF EVIDENCE-BASED CORRECTIONAL PRACTICE

1. Assess offender risk/need levels using actuarial instruments.
2. Enhance offender motivation.
3. Target interventions as follows:
   - Act on the risk principle. Target services to medium and high risk offenders rather than low risk offenders.
   - Act on the need principle. Provide services that address at least 4 criminogenic needs (needs that are directly related to criminal activity).
   - Implement the responsivity principle. Provide services according to the offender's learning style.
   - Ensure adequate program dose and duration.
4. Provide skill training for staff and monitor their delivery of services.
5. Increase positive reinforcement.
6. Engage ongoing support in natural communities.
7. Measure relevant processes/practices.
8. Provide measurement feedback.

Source: National Institute of Corrections,nicic.org.

This is sensible given that abuse of drugs alters the brain's structure and function, and changes in the brain can persist long after drug use has ceased. This is one reason that drug abusers are at risk for relapse even after long periods of abstinence and despite the potentially devastating consequences, such as rearrest and conviction. Recovery from drug addiction is a long term process and frequently requires multiple episodes of treatment. As with other chronic illnesses, relapses to drug abuse can occur and reflects a need for treatment to be reinstated and perhaps intensified. While accountability is part of recovery, it is important that professionals in the criminal justice system understand this pattern of vulnerability and relapse.

But most criminal justice professionals, policy makers, and the public are unaware of this complicated, scientifically documented recovery process.[138] This lack of understanding can lead them to conclude that

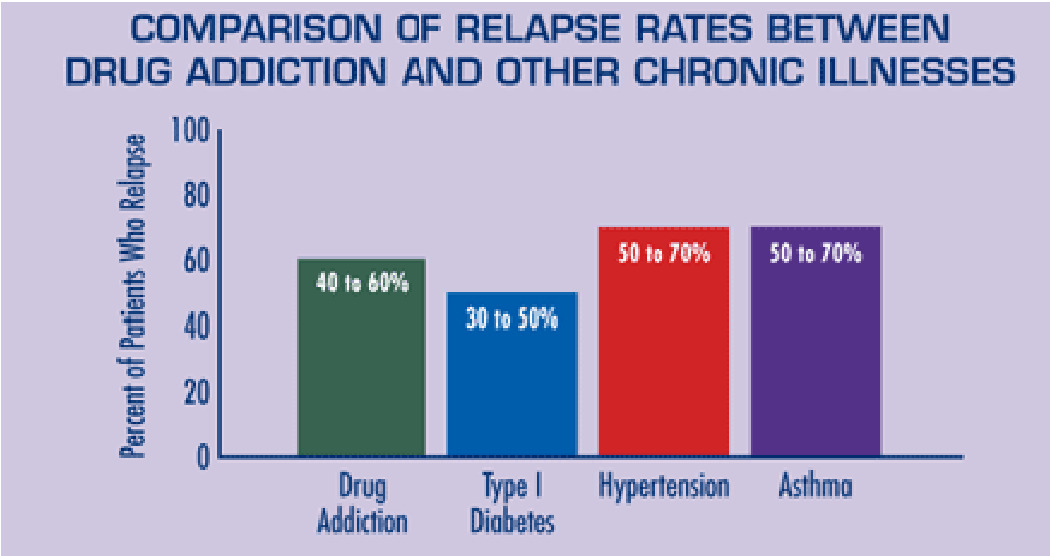
[137] Dennis, M.L., Scott, C.K., Funk, R., & Foss, M.A. (2005). The duration and correlates of addiction and treatment careers. *Journal of Substance Abuse Treatment,* 28 *(Suppl. 1)*, 51-62.
[138] Excerpts from: Mark Stanford, Director of Medical and Clinical Services, Department of Alcohol & Drug Services, Addiction Medicine Division, Santa Clara County Health & Hospital System, reviewing the literature in an editorial in the San Jose *Mercury News*, December 29, 2008.

treatment does not work, that the criminal justice system response is too lenient, or both. Making matters more confusing, according to the National Institute on Drug Abuse, drug addiction treatment is commonly set to a higher standard of effectiveness compared to interventions for other medical conditions. For most chronic diseases like diabetes or hypertension, treatment is considered effective if it works while a patient is adhering to it, and the effects may not last very long if treatment stops or individuals are not in contact with their health care provider. In this chronic disease scenario, relapse would be expected and treatment is not devalued if relapse occurs.

According to the National Institute on Drug Abuse, viewing drug addiction as an acute condition rather than a chronic disease fuels the misperception that drug abuse treatment does not work. In a groundbreaking study, McLellan and colleagues (2000) reviewed over 100 randomized controlled trials of addiction treatments and found that most participants showed significant reductions in drug use and social pathology and improved personal health, but they were not cured. The study found that client adherence to substance abuse treatment regimens logged in at 40-60%, which is comparable to patients being treated for Type 1 diabetes, hypertension, or asthma.

But drug addiction has historically been treated as an acute illness—a short-lived condition with an abrupt onset, like a cold or flu. For acute illnesses, treatment is considered a failure if its effects are not sustained. According to the National Institute on Drug Abuse, viewing drug addiction as an acute condition rather than a chronic disease fuels the misperception that drug abuse treatment does not work. In a groundbreaking study, McLellan and colleagues (2000) reviewed over 100 randomized controlled trials of addiction treatments and found that most participants showed significant reductions in drug use and social pathology and improved personal health, but they were not cured.[139] The study found that client adherence to substance abuse treatment regimens logged in at 40-60%, which is comparable to individuals being treated for Type 1 diabetes, hypertension, or asthma. Relapse in Figure 6 refers to a recurrence of symptoms each year to the point where adults require additional medical care to reestablish symptom remission.[140]

Figure 6. Groundbreaking study found addiction relapse rates similar to other chronic diseases



Source: McLellan, A.T., Lewis, D.C., O'Brien, C.P., & Kleber, H.D. (2000). Drug dependence, a chronic medical illness: implications for treatment, insurance, and outcomes evaluation. *Journal of the American Medical Association,* 284:1689-1695.

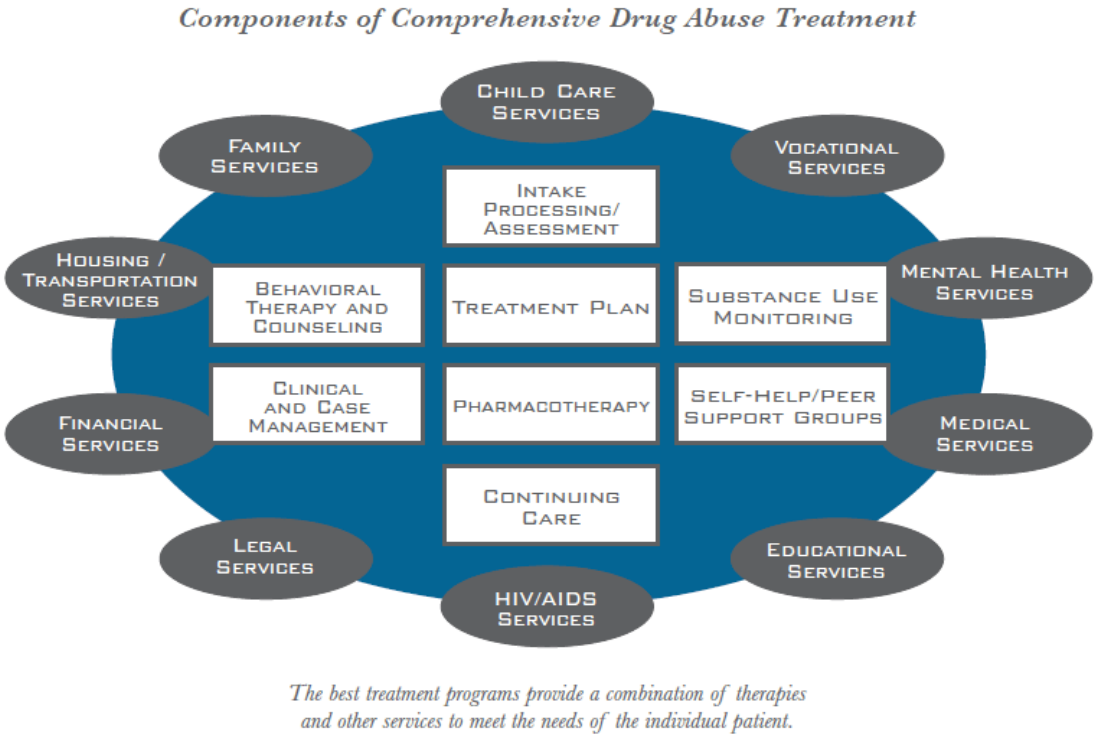
[139] McLellan, A.T., Lewis, D.C., O'Brien, C.P. & Klebar, H.D. (2000). Drug Dependence, a Chronic Medical Illness: Implications for Treatment, Insurance, and outcomes evaluation. (page 1693). *Journal of the American Medical Association, 284*, 1689-1696.
[140] Ibid, page 1693.

In sum, chronic diseases require long term care strategies, medication management, and continued monitoring to produce lasting treatment benefits. The chronic nature of the drug addiction means that relapsing is not only possible, but likely.[141] Upon relapse, as long as individuals are not behaving violently or threatening others, treatment should to be reinstated as needed, just as it is for other chronic, relapsing conditions.[142]

Substance use disorder treatment

Treatment of chronic diseases involves changing deeply imbedded behaviors. Overcoming addiction is in part a learning process, and people in recovery must work hard, first to make and then to maintain healthy changes. In behavioral therapy, clinicians help clients learn techniques to avoid or navigate safely through experiences that evoke powerful urges to consume drugs: stressful situations and the people, places, and things the individual associates with past drug-taking experiences.[143] Research has found medications are helpful for many types of drug addiction. Many individuals who require substance use disorder treatment have ancillary problems that must also be addressed, and the National Institute on Drug Abuse states that effective treatment must address the individual's drug abuse and any associated medical, psychological, social, vocational, and legal problems. It is also important that treatment be appropriate to the individual's age, gender, ethnicity, and culture (see Figure 7).

Figure 7. Effective treatment must be comprehensive



Source: National Institute on Drug Abuse. See http://www.drugabuse.gov/PODAT/TreatmentUS.html.

[141] Ibid.
[142] Ibid.
[143] National Institute on Drug Abuse at http://www.drugabuse.gov/NIDA_notes/NNvol20N1/Cocaine.html.

For the addicted client, lapses back to drug abuse indicate that treatment needs to be reinstated or adjusted, or that alternate treatment is needed. Like any other chronic illness, relapse serves as a trigger for renewed intervention.[144] Criminal justice clients must be evaluated for dangerousness and threatening behaviors must be contained, but drug treatment has been found to reduce both drug use and criminal behavior. In addition, drug treatment reduces the risk of HIV infection by six-fold, improves prospects for employment by 40%.[145]

Approximately half of individuals in substance abuse treatment who were referred by the criminal justice system successfully completed non-DUI treatment in FY 2009. This treatment completion rate is consistent with hundreds of studies published in the treatment literature.

Treatment outcomes in Colorado

Approximately half of individuals in substance abuse treatment who were referred by the criminal justice system successfully completed non-DUI treatment in FY 2009, according to data from the Division of Behavioral Health.[146] Post-treatment data are not available except in the studies described below, however, completion is an important measure of initial success. Research has found that those who complete treatment consistently have better outcomes compared to those who drop out or are terminated for noncompliance.[147] This section describes in greater detail what is known about treatment, but this fact—that about half completed substance abuse treatment in FY 2009—is an important, if limited, piece of information.

In addition, DBH found that those with co-occurring substance use and mental health disorders had, overall, positive treatment outcomes.[148] This is measured by progress toward treatment goals, and frequency of drug use between admission and discharge by outpatient clients. Although this analysis is not restricted to individuals in the criminal justice system, in FY 2009, 61% of all treatment clients made moderate to high progress toward their goals. Further, another measure of improvement is the size of the group reporting *no use of the primary drug,* and in FY 2009, DBH found that the proportion of outpatient treatment clients who reported *no* use of the primary substance increased from 61% at admission to 83% at discharge. These are important measures of success for Colorado's treatment clientele, approximately half of whom have been referred by a criminal justice system. Additionally, 78% completed DUI education or treatment and only 7.9%

Although this analysis is not restricted to individuals in the criminal justice system, in FY 2009, 61% of all treatment clients made moderate to high progress toward their goals.

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[144] National Institute on Drug Abuse. (2010). *Drugs, Brains, Behaviors: The Science of Addiction*. Available at http://www.nida.nih.gov/scienceofaddiction.

[145] National Institute on Drug Abuse. (2006). *Principles of Drug Abuse Treatment for Criminal Justice Populations: A Research-Based Guide*. Washington, D.C.: National Institutes of Health, U.S. Department of Health and Human Services.

[146] These figures were calculated from information provided in a special analysis conducted by analysts at the Division of Behavioral Health. The analysis used the data set from Division of Behavioral Health. (October 31, 2009). *The costs and effectiveness of substance use disorder programs in the state of Colorado.* Report to the General Assembly, House and Senate Health and Human Services Committee. Denver, CO: Colorado Department of Human Services., Individuals who died, received only a differential assessment, were terminated because the agency closed, or whose discharge reason fell into the "Treatment not completed at this facility" were excluded from the calculated resulting in the 54.8% figure. Thanks to Kristen Dixion, Evaluation Researcher at the Division of Behavioral Health, for conducting a special analysis of criminal justice referrals.

[147] National Institute on Drug Abuse. (2006). *Principles of Drug Abuse Treatment for Criminal Justice Populations: A Research-Based Guide*. (page 20). Washington, D.C.: National Institutes of Health, U.S. Department of Health and Human Services.

[148] Division of Behavioral Health. (October 31, 2009). *The costs and effectiveness of substance use disorder programs in the state of Colorado.* (page 23). Report to the General Assembly, House and Senate Health and Human Services Committee. Denver, CO: .Colorado Department of Human Services.

recidivated with a new alcohol or drug related driving violation.[149]

This section provides detail about the few programs for which additional outcome information is available. It begins with a short discussion of the data necessary to completely address the title of the section, and that is followed by a brief description of information tracked by the Division of Behavioral Health. Then information from evaluations of specific programs is presented, starting with substance use disorders programs, then DUI/DWAI education/treatment, and finally mental health outcomes.

Evaluation data is inadequate. Addressing the question "Does treatment work?" requires drawing on information from a variety of sources. Even so, outcomes for most individual programs remain unknown because of the lack of program evaluation resources available to comprehensively assess service providers. Additionally, any outcome information should be paired with information about the addiction and risk level of the population served, the type of service the population received, and the extent to which the style of service delivery was matched to both the risk level and learning style of the individual client, and length and intensity of treatment. These are fundamental components of evidence-based correctional practices (see sidebar on page 47). In addition, individuals in treatment are at various "stages of change"[150] that affect treatment participation and program outcome; this should be measured along with staff training and competencies in strategies to assist clients in moving through the five stages of change (precontemplation, contemplation, preparation, action, and maintenance).

Comprehensive program evaluations should take into account all of these program, staff, and client-level variables, yet these types of information are rarely available for analysis. A program may excel at engaging clients yet not do as well retaining clients in treatment. A program may work well with low risk clients but not high risk, difficult ones. A program may do well with women but not with juveniles. Data are rarely available to address these issues. Resources—time and money—to conduct the necessary analyses to address these complex issues are also rarely available.

Further, experts point to the need to revise outcome studies based on behavioral health treatment. Outcome studies typically evaluate program success by analyzing outcomes post-treatment when interventions have been discontinued. The problem with this approach is that treating the chronic nature of addiction with an acute care approach, and then evaluating the effectiveness of the treatment, can only lead to erroneous conclusions:

> *It wouldn't matter what type of treatment intervention of evidence-based practice was used because the system of care where the treatment was provided is often inadequate. What if heart disease, diabetes or asthma were subjected to the same treatment success evaluation methods? For example, what if treatment for diabetes stopped after the patient was stabilized and then someone evaluated the effectiveness and outcomes of the treatment some weeks or months later to see how well the patient sustained recovery without any type of ongoing or continuing care? Would this be realistic given what we know about diabetes? Does diabetes go away because of a treatment episode--*

[149] Deyle, R. (June 2008). *Education/Treatment Intervention Among Drinking Drivers and Recidivism*. Denver, CO: Division of Behavioral Health, Department of Human Services.

[150] DiClemente, C. C. (2003). *Addiction and change: How addictions develop and addicted people recover.* New York: Guilford Press. Therapists and supervising officers can help individuals engage in the change process, and the extent to which professionals understand and use change techniques can improve clients' efforts to succeed.

evidence-based or not? …Chronic illnesses require some level of ongoing treatment to help sustain a healthy lifestyle.[151]

With this significant caveat, then, the remainder of this section presents information about tracking treatment outcomes and evaluation study findings in Colorado.

Quality control

The Division of Behavioral Health collects information on clients served and program performance measures. It publishes annual reports that describe aggregate outcomes, and it manages 17 datasets that allow for descriptions and audits of behavioral health programs across the state.[152] It requires programs to use evidence-based practices, including cognitive-behavioral therapy modalities and medication regimes.

The Division of Behavioral Health collects information on clients served and program performance measures. It publishes annual reports that describe aggregate outcomes, and it manages 17 datasets that allow for descriptions and audits of behavioral health programs across the state.1 It requires programs to use evidence-based practices, including cognitive-behavioral therapy modalities and medication regimes.

Specifically, all 442 substance abuse agencies licensed by the Division of Behavioral Health are required to comply with the *Substance Use Disorder Treatment Rules.*[153] The list of topics addressed by the *Rules* is available as Appendix C of this report. In general, programs are licensed to serve specific client populations and, in doing so, must demonstrate compliance with each section for which licenses are requested. The *Rules* set standards of care to establish credentialing requirements for professionals. Unique sets of *Rules* apply to DUI and non-DUI offenders, including that providers must accept the recommendations of the courts for the type and level of services indicated. In Colorado, treatment recommendations for non-DUI offenders must be based on the Standardized Offender Assessment (SOA) for non-DUI offenders, which is screening and assessment information that must be provided by the courts to the provider who, in turn, delivers the requested level of care. In addition, DBH requires the use of approved treatment curricula; agencies must demonstrate that their clinical staff members are properly trained to use the treatment materials. DBH maintains a compendium of approved curricula that are specifically designed for individuals with substance use disorders and criminal involvement.

Program outcomes: Substance use disorders

Across all modalities in Colorado (regular outpatient, intensive outpatient, intensive residential treatment, transitional residential treatment, and therapeutic community), approximately half of non-DUI criminal justice clients who discharged in FY 2009 completed treatment.[154]

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[151] Excerpts from: Mark Stanford, Director of Medical and Clinical Services, Department of Alcohol & Drug Services, Addiction Medicine Division, Santa Clara County Health & Hospital System, reviewing the literature in an editorial in the San Jose Mercury News, December 29, 2008.

[152] These data sets are as follows: Colorado Client Assessment Record (2000-2006); Colorado Client Assessment Record (2007-current); Encounters: Mental Health Statistics Improvement Program; Youth Services Survey for Families; Evidence Based Practices Database; 27-10 Database; Site Review Database; Chart Audit Tool; Depression; Stigma; Community Satisfaction Survey; Bloom; DUI/DWAI Reporting System; Drug and Alcohol Coordinated Data System; Alcohol and Drug Driving Coordinated Data System; Tracking Systems of Care.

[153] A copy of the rules is available at http://www.cdhs.state.co.us/adad/PDFs/ADADSUBSTANCEUSEDISORDERTREATMENTRULES31062.pdf.

[154] Division of Behavioral Health. (October 31, 2009). *The costs and effectiveness of substance use disorder programs in the state of Colorado.* Report to the General Assembly, House and Senate Health and Human Services Committee. Denver, CO: Colorado Department of Human Services.

Not surprisingly, completion rates vary by treatment modality, as shown in Table 2 in Section Three. For example, over 700 criminal justice clients (non-DUI) who participated in Intensive Residential Treatment (IRT) in FY 2009 completed at a rate of 82.8%; the most common modality offered in Colorado is traditional outpatient treatment, and criminal justice clients (non-DUI) completed treatment at a rate of 45% in FY 2009 (see Table 2).

The following information focuses on program outcomes from evaluation studies of individual programs.

Short Term Intensive Residential Remediation Treatment (STIRRT). STIRRT is a 14-day intensive residential substance use disorder program followed by continuing care designed for adult offenders who have been unsuccessful in outpatient treatment. Individuals referred to the program are on probation or parole and are facing a prison sentence for noncompliance with the supervision condition to successfully complete treatment.

Four STIRRT programs operate across the state with money provided by the Division of Behavioral Health. Because the residential portion of the program is only 14 days long, clients are encouraged to continue in community outpatient treatment after they are released from STIRRT. Clients were required to pay for continuing care following STIRRT, and because DBH officials believed this financial burden prevented individuals from participating in ongoing treatment, in FY 2008 funding was provided for nearly 900 individuals to participate in 8 months of community based outpatient treatment.[155]

An evaluation of the STIRRT programs is underway by the Division of Criminal Justice and will be published in late 2010. Preliminary findings of a sample from that study show a very high program completion rate for those who participated in residential STIRRT in between January 1, 2008 and June 30, 2009, as shown in Table 3. Note that the number of cases in the following analysis varies due to missing data on certain data elements. This high proportion of program completions is not surprising since the residential portion of STIRRT very short term and is considered a "last chance" before prison.

Table 3. Reason for residential termination by provider, STIRRT Programs (n = 1231)

	success/treatment completed	failed/treatment not completed	Other/unknown	Total
Arapahoe House, Denver (579)	92.7%	6.3%	1.0%	100%
Crossroads Turning Point, Pueblo (426)	87.1%	6.8%	6.1%	100%
Mesa County (82)	96.3%	3.7%	0.0%	100%
Larimer County (144)	92.4%	4.2%	3.4%	100%
Total (1231)	91.0%	6.0%	3.0%	100%

Source: Data from Drug/Alcohol Coordinated Data System (DACODS) provided by Division of Behavioral Health and analyzed by the Division of Criminal Justice, Office of Research and Statistics. The study includes cases who entered STIRRT between January 1, 2008 and June 30, 2009. "Other/Unknown" includes individuals who may have been transferred to another program.

[155] Continuing care services are intended to complement the STIRRT program curricula and use the cognitive behavioral program called Strategies for Self Improvement and Change (SCC), discussed later in this section.

The substance abuse treatment literature shows that better outcomes are associated with treatment that lasts longer than 90 days[156] (recent studies suggest longer periods of treatment[157]). For this reason, the 14-day program is expected to stabilize individuals in a residential setting who then are released into a community based treatment program. However, participation in Continuing Care (outpatient treatment) has been limited in the past, and officials at DBH believed that limited participation on the part of STIRRT graduates was the result of the cost of outpatient treatment. Consequently, DBH requested and received funding from the General Assembly in FY 2008 to serve hundreds of criminal justice clients in Continuing Care following successful completion of STIRRT. Despite this additional funding, in FY 2009, only 42.3% participated in continuing care, as shown in the third column of Table 4).

Information describing client risk levels is presented in the second column titled Average LSI Score. The Level of Supervision Inventory (LSI) is a 54-item scale used by criminal justice agencies in Colorado and many other states that identifies specific areas in the offender's life that may pose problems, such as employment and education, family relationships, attitudes, companions, finances, leisure time, and housing. Scores on the instrument range from 1-54, and scores above 29 are to be considered high risk/need. STIRRT eligibility criteria require that individuals score high risk on the LSI scale. On average, individuals participating in STIRRT in all four programs fell into the high risk/need category. LSI data were only available at the program level for all participants and therefore cannot be analyzed further. Table 4 shows the proportion of STIRRT participants that received a new county or district court filing within 6 and 12 months of release from the two week STIRRT program. The table presents recidivism findings for each STIRRT program overall, and for those who did and did not participate in Continuing Care. The overall 6-month recidivism rate was 12.4% for those who participated in Continuing Care and 16.6% for those who did not, a statistically significant difference. The 12-month recidivism rate was 24.7% for those who participated in Continuing Care compared to 25.2% for those who did not, a difference that was not statistically significant. Note that Denver County court (misdemeanor) filing data are not available for analysis and are excluded from recidivism calculations. The lack of Denver misdemeanor data disproportionately affects programs based in Denver County. This may contribute to the finding that recidivism resulting from misdemeanor filings only is 38.3% lower for Arapahoe House discharges than that found for discharges from non-Denver based programs.

[156] National Institute on Drug Abuse. (2006). *Principles of Drug Abuse Treatment for Criminal Justice Populations: A Research-Based Guide*. (page 20). Washington, D.C.: National Institutes of Health, U.S. Department of Health and Human Services.
[157] See Dennis, M.L., Scott, C.K., Funk, R., & Foss, M.A. (2005). The duration and correlates of addiction and treatment careers. *Journal of Substance Abuse Treatment, 28 (Suppl. 1),* 51-62.

Table 4. New county or district court filing (recidivism) by STIRRT provider and Continuing Care[1]

	Average LSI Score[2]	Participated in Continuing Care	6 Month Recidivism Rate[4]	12 Month Recidivism Rate[4]
Arapahoe House, Denver (Does not include women)	33.2	**537 completed the STIRRT program**	**13.8% (of 521 at risk)**	**22.1% (of 331 at risk)**
Participated in CC		42.5% (225/537)	10.1 (228)	17.6 (142)
Did Not participate in CC		57.5 (309/537)	16.7 (293)	25.4 (189)
Crossroads Turning Points, Pueblo	33.7	**371 completed the STIRRT Program**	**15.3 (of 359 at risk)**	**25.6 (of 238 at risk)**
Participated in CC		50.9 (189/371)	14.8 (189)	30.9 (123)
Did Not participate in CC		49.1 (182/371)	15.9 (170)	20.0 (115)
Mesa County	31.2	**79 completed the STIRRT Program**	**15.2 (of 79 at risk)**	**11.1 (of 36 at risk)**
Participated in CC		25.3 (20/79)[5]	20.0 (20)[3]	22.2 (9)[3]
Did Not participate in CC		74.7 (59/79)	13.6 (59)	7.4 (27)
Larimer County	33.3	**133 Completed the STIRRT Program**	**17.2 (of 128 at risk)**	**40.0 (of 85 at risk)**
Participated in CC		27.8 (37/133)[5]	10.8 (37)[5]	36.4 (22)[5]
Did Not participate in CC		72.2 (96/133)	19.8 (91)	41.3 (74)
Overall	32.8	**1120 Completed STIRRT**	**14.8 (of 1087 at risk)**	**24.9 (of 690 at risk)**
Participated in CC		42.3 (474/1120)	12.4 (474)	24.7 (296)
Did Not participate in CC		57.7 (646/1120)	16.6 (613)	25.1 (394)

[1]Upon completion of the STIRRT program, individuals entered the study at various points during FY 2009. The risk to recidivate increases with longer periods of opportunity to re-offend and a recidivism study requires that all offenders have identical "opportunity periods." More individuals are available for the recidivism analysis at the 6-month "opportunity period" than at 12 months. All individuals in the 12-month analysis are included in the 6-month analysis, but only those reaching the full 12-month opportunity period are included in the 12-month analysis. Note that Denver County court (misdemeanor) filing data are not available for analysis and are excluded from recidivism calculations. The lack of Denver misdemeanor data disproportionately affects programs based in Denver county. This may contribute to the finding that recidivism resulting from misdemeanor filings only is 38.3% lower for Arapahoe House discharges than that found for discharges from non-Denver based programs.
[2] LSI is the Level of Supervision Inventory, a 54-item instrument that measures individual risk/need levels.
[3] Data based on groups with very few cases should be interpreted with caution.
[4] Continuing Care participants include only those individuals who were admitted to the STIRRT residential program between January 1, 2008 and June 30, 2009. Anyone who participated in the residential program prior to January 1, 2008, or was already in the program on this date, was excluded from the sample.
Source: Data provided by Drug/Alcohol Coordinated Data System (DACODS), Division of Behavioral Health and analyzed by the Division of Criminal Justice, Office of Research and Statistics.

In sum, the four STIRRT programs served 1,231 criminal justice clients over the 18-month study and the overall residential program completion rates were above 90%. In this group, 1 in 4 clients received a new court filing within 12 months, a very positive finding given the serious nature of the offenders - all programs reported average LSI scores that indicated *high* need/risk levels of the clientele. Outcomes vary by program, as shown in Table 4.

Strategies for Self-Improvement and Change (SSC). As discussed in the previous section, a curriculum called *Strategies for Self-Improvement and Change (SSC)* may be the most widely used treatment strategy in Colorado for criminal justice clients in the public treatment system. This documented program is a cognitive behavioral, three-phase, 48-week treatment course for substance abusers. SSC providers must be trained and approved to deliver the curriculum. In October 2009, Booth and Lehman

published an evaluation of 685 clients discharged from participation from at least one SSC service between July 2004 and June 2006 from 8 programs using SSC.[158] The eight programs are listed below:

- Arapahoe House, Denver Metro Area
- Addiction, Research and Treatment Services (ARTS), Denver Metro Area
- Community Alcohol Drug Rehabilitation and Education Center, Denver Metro Area
- Sobriety House, Denver Metro Area
- Island Grove Regional Treatment Center, Northeast Colorado
- Centennial Mental Health, Northeast Colorado
- Crossroads' Turning Points, Pueblo
- San Luis Valley Mental Health Center, Southern Colorado

The study of SSC found an overall 12- and 24-month recidivism-to-DOC rate of 37.8% and 49.5%, respectively.1 The study included individuals who had as few as a single session, even though SSC is a 48 week program. Booth and Lehman found that those who remained in treatment longer and those who completed treatment had lower recidivism rates compared to those who did not complete treatment.

Given the fact that SSC may be the most frequently used curriculum for substance abuse treatment in Colorado, it should be evaluated on a regular basis.

The study included individuals from all aspects of the criminal justice system (probation, community corrections, municipal and district courts) and the recidivism measure was a sentence to the Department of Corrections. While this measure is used by DOC, most recidivism studies in Colorado use new arrest or court filing as the recidivism measure, and use of DOC incarceration instead makes the findings not comparable to other studies of other programs. This measure may also underestimate recidivism since the probability of recidivism, defined as DOC incarceration, was not equal across the study groups. Municipal cases are ineligible for a DOC sentence.

The study of SSC found an overall 12- and 24-month recidivism-to-DOC rate of 37.8% and 49.5%, respectively.[159] Lower recidivism was associated with treatment duration (as measured by days in treatment) and treatment completion. The researchers report that 47% of the non-recidivists completed treatment compared to 18% of those who completed treatment.
Individual program-specific data were not presented in the report, nor were the numbers of clients in each program, so it is not possible to know how the outcomes of certain programs might affect the overall outcome figure.

Given the fact that SSC may be the most frequently used curriculum for substance abuse treatment in Colorado, it should be evaluated regularly.

Peer 1 and The Haven. These programs have been operating in Colorado for many years and are part of the Addiction, Research and Treatment Services (ARTS) program operated by the University of Colorado Medical Center. The programs are part of the state halfway house system for offenders, a collection of residential halfway houses serving individuals on probation and parole. Peer 1 serves men and The Haven serves women. Many have co-occurring disorders. Both programs are therapeutic communities, a long-term treatment modality where individuals live together and learn to take responsibility for themselves and others in the group. Therapeutic communities use relationships within the social system to manage and change behaviors. Peer influence, mediated through a variety of group processes, is used

[158] The study was funded by Signal Behavioral Health Network, a DBH designated Managed Service Organization. Booth, R.E. & Lehman, W.E.K. (2009). *Strategies for Self-Improvement and Change and Recidivism Following Treatment*. Denver, CO: Signal Behavioral Health Network. The treatment manual is available from Amazon, at http://www.amazon.com/Criminal-Conduct-Substance-Abuse-Treatment/dp/0761909443.
[159] The recidivism period was measured from date of last program contact.

to help individuals learn and assimilate social norms and develop more effective social skills. This method of intervention for substance abuse began about 40 years ago and is among the most well researched and effective methods of substance abuse treatment.[160]

Individuals who participated in Peer 1 and The Haven as part of the community corrections system in FY 2008 were analyzed for this paper by the Division of Criminal Justice to determine 12-month recidivism rates. Recidivism was measured as any new court filing. In FY 2008, 37 men successfully completed community corrections/Peer 1. Only 3 men received a new district court filing, representing a 91.9% success rate at 12 months. The same analysis showed that the 41 women who successfully completed the program at The Haven in FY 2008, and 3 received a new court filing, representing a 92.7% success rate at 1 year.[161]

DOC and Peer 1. A study by the Colorado Department of Corrections found that men who participated in the prison therapeutic community for substance abusers at the Arrowhead Correctional Center and then progressed to Peer 1 had significantly lower return-to-prison rates than men who did not participate in prison treatment and men who participated in the Arrowhead TC but did not continue treatment at Peer 1.

Colorado Community Corrections Programs. This system of 31 halfway houses provides structured residential placement for approximately 5,000 offenders each year. Eighty-five percent of those who successfully completed community corrections and who participated in substance abuse treatment in FY 2008 remained crime-free during the year following release from the halfway house, according to a special analysis conducted for this paper by the Division of Criminal Justice.

DUI/DWAI. In 2007, over 30,000 individuals were arrested for driving while intoxicated (DUI) or driving while their ability was impaired by some other psychoactive substance. In June, 2008, the Division of Behavioral Health published a report of DUI/DWAI services and recidivism among 16,194 individuals convicted of these offenses between 2001 and 2004.[162] Services included Level I Education, Level II Education, Level II Education and Treatment, and Level II Treatment. Level I Education is a 12 hour, 2-day course on drug and alcohol designed for non-problem DUI offenders. These individuals have no prior impaired driving offenses and generally had a relatively low Blood Alcohol Content (BAC) less than .15 at the time of arrest. Level II Education, 24 hours over 12 weeks, combines cognitive education focused on substance use and driving and is usually conducted in a group setting with no more than 12 attendees. Level ll Treatment is therapy for individuals who may have a history of alcohol and drug problems, a high BAC or evidence of substance abuse or dependence (addiction). Level ll Treatment involves five to 10 months of group therapy with an emphasis on behavior change. These clients in general had a BAC of more than .15 but less than .30. About half of those in the DBH study were

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[160] The National Institute on Drug Abuse's Drug Abuse Treatment Outcome Study (DATOS), the most recent long-term study of drug treatment outcomes, showed that those who successfully completed treatment in a TC had lower levels of cocaine, heroin, and alcohol use; criminal behavior; unemployment; and indicators of depression than they had before treatment. See http://www.drugabuse.gov/ResearchReports/Therapeutic/Therapeutic2.html#beneficial.

[161] In FY 2008, 48.8% and 67.7% of those who entered Peer 1 and The Haven, respectively, successfully completed the program; the remainder were terminated for absconding or received technical violations. These were very high risk populations, with average LSI scores of 36.5 and 35.3, respectively. See Harrison, L. (2010). *Fiscal Year 2008 Community Corrections Program Terminations: Client Needs, Services and Outcomes.* Denver, CO: Office of Research and Statistics, Division of Criminal Justice, Department of Public Safety. Available at http://dcj.state.co.us/ors/pdf/docs/rev-FY%202008%20COMCOR%20Final%20Report.pdf.

[162] Deyle, R. (2008). *Education/Treatment Intervention: Drinking Drivers and Recidivism.* Denver, CO: Division of Behavioral Health, Department of Human Services.

assigned to Level II Education combined with treatment; 56% had a prior DUI. Of those in Level II Treatment, 65% had a prior DUI.

The DBH study found that significant variation in outcome by the type of intervention, and individual risk was correlated with the type of intervention. Compared to those who completed the assigned intervention, those who did not complete were younger, less educated, had a much lower monthly income, had a higher BAC, and were more likely to have had prior DUIs and prior education or treatment episodes. Prior DUIs and treatment episodes suggests that these individuals had more entrenched addictions.

As shown in Table 5 below, recidivism—defined as a subsequent arrest for a DUI/DWAI as recorded in the Division of Motor Vehicles violation records—were less than 10% for all the intervention groups. Those participating in Level 1 Education had the lowest failure rate at 4.5%; this is likely to be the least serious group since it is the least serious sanction. But even among the more serious offenders, with higher average BAC readings and a greater likelihood of having a prior driving-related arrest and treatment episode, success was likely for 9 out of ten education-treatment participants.

Table 5. Colorado: Impaired driving recidivism after DUI/DWAI education-treatment

Intervention	n	Average Age	Male	Unemployed	Avg. BAC	Prior DUI	2008 Study New DUI/ DWAI Arrest
Level I Education	1,435	32.3	68.8%	20.0%	.103	2.0%	**4.5%**
Level II Education	5,661	31.2	76.9	23.0	.142	19.5	**7.3**
Level II Education and Treatment	7,805	34.3	78.9	21.3	.173	55.6	**9.0**
Level II Treatment	2,106	33.5	78.4	23.0	.173	64.6	**7.9**

Source: Deyle, R. (2008). *Education/Treatment Intervention Among Drinking Drivers and Recidivism.* Division of Behavioral Health, Department of Human Services, Denver, CO. Data from Tables 1 and 4.

The DBH study also found that, for all intervention types, recidivism was more likely to occur after the person left the program rather than while they were in treatment. It also found that, in general, those with the shortest average time between the arrest and treatment were more likely to, first, complete treatment and, second, remain DUI-arrest free during the study period.

Program outcome: Mental health treatment

Very little information is available about the post-treatment outcomes of individuals participating in mental health programs. However, as mentioned at the beginning of this section, a DBH study found that those with co-occurring substance abuse and mental health disorders had, overall, positive treatment outcomes, as measured by progress toward treatment goals, and frequency of drug use between admission and discharge by outpatient clients. Although this analysis is not restricted to

individuals in the criminal justice system, in FY 2009, 61% of all treatment clients made moderate to high progress toward their goals.[163]

DOES DRUG TREATMENT WORK?

Studies show that treatment can cut drug abuse in half, reduce criminal activity up to 80%, and reduce arrests up to 64% *(Center for Substance Abuse Treatment, the National Treatment Improvement Evaluation Study (NTIES), SAMHA Publication No. SMA-97-3156. 1997)*, and increase employment by 40%. Based on a review of this and other scientific literature on drug abuse treatment and criminal behavior, in 2006 the National Institute on Drug Abuse released *Principles of Drug Abuse Treatment for Criminal Justice Populations*. This publication discusses 13 principles proven through research to help criminal justice organizations tailor treatment programs to better serve their populations. In brief, these principles are:

- Drug addiction is a brain disease that affects behavior.
- Recovery from drug addiction requires effective treatment, followed by management of the problem over time.
- Treatment must last long enough to produce stable behavioral change.
- Assessment is t he first step in treatment.
- Tailoring services to fit the needs of the individual is an important part of effective drug abuse treatment for criminal justice populations.
- Drug use during treatment should be carefully monitored.
- Treatment should target factors that are associated with criminal behavior.
- Criminal justice supervision should incorporate treatment planning for drug abusing offenders, and treatment providers should be aware of correctional supervision requirements.
- Continuity of care is essential for drug abusers re-entering the community.
- A balance of rewards and sanctions encourages pro-social behavior and treatment participation.
- Offenders with co-occurring drug abuse and mental health problems often require an integrated treatment approach.
- Medications are an important part of treatment for many drug abusing offenders.
- Treatment planning for drug abusing offenders who are living in or re-entering the community should include strategies to prevent and treat serious, chronic medical conditions, such as HIV/AIDS, hepatitis B and C, and tuberculosis.

Two programs in the community corrections halfway house system focus on providing services to individuals with mental illness. These programs are discussed below.

ICCS-JERP. The John Eachon Re-entry Project (JERP) is a 15-bed program-within-a-program, operating at the ICCS community corrections facility in Lakewood. The residential program serves offenders with mental illness who are transitioning from prison to the community. ICCS coordinates with Jefferson County Mental Health to provide specialized case management, counseling, support and medication

[163] Division of Behavioral Health. (October 31, 2009). *The costs and effectiveness of substance use disorder programs in the state of Colorado.* (page 23). Report to the General Assembly, House and Senate Health and Human Services Committee. Denver, CO: Colorado Department of Human Services.

management. In FY 2008, 13 individuals completed the JERP program. An analysis completed by the Division of Criminal Justice for this paper found that 2 of these offenders received new criminal court filings within 12 months of release from the program, resulting in a success rate of 84.6%.

Independence House, Fillmore. This residential community corrections programs also serves offenders with mental illness who are transitioning to the community from the Department of Corrections' San Carlos facility which serves inmates with mental illness. In FY 2008, 34 individuals successfully terminated from the Fillmore program, and 6 received new court filings while in the program, resulting in an 82.4% success rate.

How do you know if a specific program is working?

Frequently, decision makers are interested in the success rates of specific programs that operate in their jurisdictions. As reflected in the discussion here, very little information is available about individual programs. However, Evidence Based Practices (EBP) to reduce recidivism are well established and use of EBP is expected by programs licensed by the Division of Behavioral Health.

But assessing the effectiveness of particular programs is a complex undertaking, as mentioned earlier in this section. Comprehensive evaluations should account for a variety of important program, staff and client characteristics that can affect outcome. For example, programs that serve long-term addicts are likely to have higher recidivism rates. Most of the time, sufficient information is unavailable to account for the myriad of variables that can affect program outcomes, and evaluation resources to develop the measures and collect and analyze the data are rarely available.

Decision makers can play a role in effectiveness

Fortunately, decision makers can participate in and even lead efforts to improve offender outcomes by consistently promoting collaboration and targeting long-term recidivism reduction as a goal, and by positively encouraging offenders to engage in the treatment process. The most effective intervention models integrate criminal justice and drug treatment systems and services. Treatment and criminal justice personnel work together on treatment planning—including implementation of screening, placement, testing, monitoring, and supervision—as well as on the systematic use of sanctions and rewards.

The success of drug courts is linked to the collaboration among professionals in the courtroom, and the coordination between correctional planning and drug abuse treatment. This fundamental team approach allows treatment providers to incorporate correctional requirements as treatment goals and criminal justice professionals to ensure individual treatment plans meet each person's needs—and that person's changing needs.

The National Institute on Drug Abuse(NIDA) recommends that criminal justice and treatment professionals work together to evaluate and assist with housing and childcare; medical, psychiatric, and social support services; and vocational and employment needs. For offenders leaving jail and prison, planning should incorporate the transition to community-based treatment and links to appropriate post release services to improve the success of drug treatment and re-entry. Returning to environments or activities associated with prior drug use may trigger strong cravings, risking relapse. A coordinated approach by treatment and criminal justice staff provides the best way to detect and intervene with these and other threats to recovery. According to NIDA, abstinence requirements may necessitate a

rapid clinical response, such as more counseling, targeted intervention, or increased medication, to prevent relapse. Ongoing coordination between treatment providers and courts or parole and probation officers is important in addressing the complex needs of these re-entering individuals.[164]

In addition, decision makers can become informed consumers by becoming familiar with evidence-based practices for behavioral health treatment. They can ask program administrators to provide information that reflects the extent to which the program has been designed to effectively serve a criminal justice population, including staff qualifications and training. They can also ask offenders what they found helpful and not helpful about specific interventions and programs.

Appendix D provides a summary of EBPs in corrections to reduce recidivism. In addition, evaluations of drug courts have consistently found reductions in recidivism;[165] DUI courts have been modeled after drug courts and include essential evidence-based components in the program design. The following are some evidence-based program components.

- Program duration of at least 90 days (the longer individuals are in treatment, the better their outcomes)[166]
- Use of a comprehensive needs assessment that directs the treatment plan and addresses at least these issues[167]
    - Special needs
    - Supportive family/peers
    - Stable and affordable living environment
    - Strong criminal or pro-social attitudes
    - Financial stability
    - Personal resiliency/coping ability/resources
    - Work stability
- Use of highly trained staff
- Program design accommodates variations in individual learning styles
- Few clients drop out or walk-away from treatment (reflects lack of engagement)
- The program meets all licensing requirements
- Works well with criminal justice agency staff to coordinate sanctions and incentives

[164] National Institute on Drug Abuse. (2010). *Principles of drug abuse treatment for criminal justice populations: A research-based guide.* Washington, D.C.: National Institute of Health, U.S. Department of Health and Human Services. Available at http://www.nida.nih.gov/PODAT_CJ/principles.

[165] Przybylski, R. (2008). *What works: Effective Recidivism and Risk Focused Prevention Programs*. Denver, CO. Available at http://dcj.state.co.us/ors/pdf/docs/WW08_022808.pdf.

[166] According to the National Institute on Drug Abuse, generally, better outcomes are associated with treatment that lasts longer than 90 days, with the greatest reductions in drug abuse and criminal behavior accruing to those who complete treatment. Again, legal pressure can improve retention rates. Early phases of treatment help the participant stop using drugs and begin a therapeutic process of change. Later stages address other problems related to drug abuse and, importantly, help the individual learn how to self-manage the drug problem. See http://www.drugabuse.gov/PODAT_CJ/faqs/faqs2.html#8.

[167] One of the goals of treatment planning is to match evidence-based interventions to individual needs at each stage of drug treatment. Over time, various combinations of treatment services may be required.

Summary

In sum, the majority of individuals complete treatment successfully, although many people will require multiple episodes of treatment. Data from the Division of Behavioral Health shows that individuals in treatment used drugs and alcohol for many years prior to admission, and structural changes in the brain caused by drug abuse make recovery a difficult and often lifelong process. Although comprehensive, well-designed evaluations of individual programs are rarely conducted, performance measures and other methods of quality control are systematically used by the Division of Behavioral Health in the process of licensing and monitoring programs. The Center for Substance Abuse Treatment reports that treatment can cut drug abuse in half, reduce criminal activity up to 80%, and reduce arrests up to 64%. Elements of effective programs are well documented, and criminal justice professionals can strive to improve offender outcomes by promoting the most effective models which integrate criminal justice and drug treatment systems and services.

SECTION FIVE
TREATMENT AVAILABILITY AND FUNDING

The Commission on Criminal and Juvenile Justice has recommended that Colorado move toward an integrated sanction/treatment approach to sentencing drug offenders. Is this recommendation feasible given the paucity of treatment resources? As previously mentioned, the 2008 National Survey on Drug Use and Health found that 23 million individuals aged 12 or older needed treatment for alcohol or illicit drug use problems and only 9.2% received treatment at a specialty facility that year.[168]

The Commission on Criminal and Juvenile Justice has recommended that Colorado move toward an integrated sanction/treatment approach to sentencing drug offenders. Is this recommendation feasible given the paucity of treatment resources?

Note that the financial information provided in this section accounts primarily for state funding. It does not reflect local funding resources, self-pay or services subsidized by insurance.

Substance abuse treatment gaps for Colorado's justice system clients, circa 2001

In December 2001, the Interagency Advisory Committee on Adult and Juvenile Correctional Treatment (IAC) published an analysis of substance abuse treatment availability and compared this information with measures of treatment need of offenders on probation, in community corrections, and in prison.[169] While the analysis addresses a key question about gaps in capacity, the methods used to estimate both needs and treatment capacity may result in considerable error. This is not a criticism of the analysis, but rather it is recognition of the difficulty in accurately measuring the specific level of treatment need and service capacity given the available data.

In December 2001, the Interagency Advisory Committee on Adult and Juvenile Correctional Treatment (IAC) published an analysis of substance abuse treatment availability and compared this information with measures of treatment need of offenders on probation, in community corrections, and in prison.

The IAC analysis found that the availability of treatment for those in need of drug and alcohol education and weekly outpatient services generally corresponded to demand in the offender population. That is, the majority of treatment providers offered education and weekly outpatient treatment. This finding is consistent with the National Survey of Substance Abuse Treatment Services (N-SSATS) which found that 90% of treatment programs in Colorado provide regular outpatient services.[170]

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[168] Substance Abuse and Mental Health Services Administration. (2009). *Results from the 2008 National Survey on Drug Use and Health: National Findings*. Rockville, MD: Office of Applied Studies, NSDUH Series, United States Department of Health and Human Services Publication No. SMA 09-4434.

[169] Lombard, B., O'Keefe, M., Reed, D., Schlessinger, K., & Tapia, G.A. (2001). *Statewide Bulletin: Analysis of offender substance abuse treatment needs and the availability of treatment.* Denver, CO: Interagency Advisory Committee on Adult and Juvenile Correctional Treatment.

[170] Office of Applied Studies. (2009). *National Survey of Substance Abuse Treatment Services*. Washington, D.C.: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

The analysis of offender needs found that the greatest treatment need among adult offenders was for intensive outpatient services, yet in 2001 the ratio of need to treatment availability was 6:1. That is, the need for intensive outpatient services exceeded availability by a ratio of 6:1. Justice clients requiring intensive residential treatment (IRT) faced a ratio of need to availability of 3:1, and those in need of the greatest level of intervention, a therapeutic community program, faced a 5:1 treatment shortfall. Overall, the IAC 2001 study estimated that there was an annual shortfall of 6,270 community treatment beds/slots. Substance abuse treatment needs among FY 2000 Department of Corrections' prison admissions were estimated to 3,457 beds/slots short of service availability for those needing weekly outpatient, intensive outpatient, and intensive residential/ therapeutic community treatment. However, services availability exceeded the need for women offenders requiring weekly outpatient services. The authors of the IAC analysis note that these estimates of service gaps likely under represented the actual gaps.

Court professionals and supervising officers can promote change by encouraging active treatment participation, focusing on progress, and endorsing the belief that change is possible, according to Prochaska who also recommends that professionals help individuals weigh the advantages of change (e.g., provide a positive example for their children, improvement in physical symptoms associated with substance abuse, imagining their life without the trouble caused by the problem, etc.).

Treatment amenability

A discussion of treatment availability requires mentioning treatment amenability. Even if appropriate treatment were available to 100% of those in need, the effectiveness of treatment will be affected by each person's willingness to change. Change involves progress through a series of stages. Prochaska and DiClemente[171] first described change as a process that unfolds over time:[172]

1. Precontemplation (taking action "in the next 6 months"— 40% fall here)
2. Contemplation (intend to change in the next 6 months – 40%)
3. Preparation (intend to take immediate action, usually measured as "in the next month"— 20%[173])
4. Action (made meaningful lifestyle change within the past 6 months)
5. Maintenance (actively working to prevent relapse; this stage typically lasts from 6 months to 5 years)
6. Termination (individuals experience zero temptation – less than 20% reach this stage)

The first two stages are characterized by low expectations and poor therapeutic alliance. Court professionals and supervising officers can promote change by encouraging active treatment participation, focusing on progress, and endorsing the belief that change is possible, according to Prochaska who also recommends that professionals help individuals weigh the advantages of change

[171] Prochaska, J.O. & DiClemente, C.C. (1983). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory, Research and Practice, 19,* 276-288.
[172] Prochaska, J.O. (2001). How do people change? In Hubble, M. A., Duncan, B.L., & Miller, S.D. (Eds.), *The Heart and Soul of Change: What works in therapy.* pp.33-55 Washington, DC: American Psychological Association.
[173] These percents are based on a large study of 15 unhealthy behaviors among 20,000 HMO members (Rossi, J.S. (1992). Stages of change for 15 health risk behaviors in an HMO population. Cited in Prochaska, J.O. (2001). How do people change? In Hubble, M. A., Duncan, B.L., & Miller, S.D. (Eds.), *The Heart and Soul of Change: What works in therapy.* (pages 33-55). Washington, DC: American Psychological Association.

(e.g., provide a positive example for their children, improvement in physical symptoms associated with substance abuse, imagining their life without the trouble caused by the problem, etc.[174]).

According to the information in the N-SSATS, in 2008 Colorado had a greater proportion of outpatient slots than the national average and less than half the proportion of residential treatment beds and hospital inpatient beds. Note that these figures are not specific to facilities serving criminal justice populations.

Treatment availability in 2008

The Substance Abuse and Mental Health Services Administration oversees the National Survey of Substance Abuse Treatment Services (N-SSATS). The survey (first mentioned in Section Two) collects information from all facilities in the U.S., both public and private, that provide substance use disorder treatment, excluding non-treatment halfway houses, jails, prisons, and other organizations that treat incarcerated clients exclusively. It also excludes solo practitioners. In 2008, 394 programs offered regular outpatient services, and 196 offered intensive outpatient services, 54 programs in Colorado offered non-hospital residential care, and 12 offered hospital inpatient. As previously mentioned, 90% of Colorado's 436 programs surveyed by the N-SSATS offered outpatient, and 12.4% offered non-hospital residential treatment; 234 (54%) programs served criminal justice clients. Table 6 compares N-SSATS findings for 2008 to nearby states and those with a similar number of treatment facilities responding to the survey.

Table 6. Type of substance abuse treatment provided, National Survey of Substance Abuse Treatment Services, 2008

State (number of programs in survey)	Regular outpatient	Intensive outpatient	Any residential (non-hospital)	Hospital inpatient
Colorado (436)	90.4%	45.4%	12.4%	2.8%
Kansas (221)	94.6%	46.6%	14.5%	0.5%
Arizona (212)	70.6%	53.3%	26.4%	7.1%
New Mexico (145)	80.0%	41.4%	21.4%	2.8%
Utah (146)	70.5%	42.5%	33.6%	5.5%
North Carolina (410)	76.3%	35.1%	17.1%	5.6%
Washington (435)	88.3%	77.7%	13.8%	2.3%
Texas (480)	67.1%	50.8%	30.2%	10.6%
Ohio (402)	80.1%	50.5%	26.9%	7.0%
National average (13,688)	**73.8%**	**43.6%**	**26.6%**	**6.1%**

Source: Office of Applied Studies. (2009). *National Survey of Substance Abuse Treatment Services*, 2008. Washington, D.C.: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services, page 80.

According to the information in the N-SSATS, in 2008 Colorado had a greater proportion of outpatient slots than the national average and less than half the proportion of residential treatment beds and hospital inpatient beds. Note that these figures are not specific to facilities serving criminal justice populations.

[174] Prochaska (2001) recommends that individuals be asked to identify the benefits of change, and that most will list four or 5 benefits. The next step is to inform them that there are 8 to 10 times that amount, and professionals should challenge them to double or triple their list before their next meeting. Encouraging counselor calls, buddy systems, sponsors, and self-help groups build social support for engaging in and maintaining change. These are examples of how all criminal justice professionals can promote treatment success. Prochaska, J.O. (2001). How do people change? In Hubble, M. A., Duncan, B.L., & Miller, S.D. (Eds.), *The heart and soul of change: What works in therapy.* pp.33-55 Washington, DC: American Psychological Association.

Offender fees, fines and surcharges

Colorado relies heavily on money from offenders to subsidize treatment for all offenders and also to pay for their own court-ordered behavioral health treatment. A myriad of fees, fines and surcharges are levied against the offender in statute and the priority for payment of these fees is listed in statute (CRS 18-1.3-204(2.5)). The first 16 fees and surcharges are listed below. An additional list of the most commonly ordered fees and associated costs and waiver provisions for district and count court is available in Appendix E.

1. Current child support order
2. Child support arrearage
3. Child support debt order
4. Crime victim compensation fund ($125-163)
5. Victims assistance fund ($125-163)
    a. May be waived or suspended
6. Law enforcement assistance fund ($90)
    a. May be waived or suspended
7. Restitution (amount varies with loss)
    a. May be decreased with consent with prosecuting attorney
8. Time payment fee ($25);
    a. May be waived or suspended
9. Late fees ($10)
    a. May be waived or suspended
10. Probation supervision fees ($50/month)
    a. May be waived or lowered
11. Drug offender surcharge ($200-4,500, see Table 7)
    a. May be waived
12. Sex offender surcharge ($150-3,000)
    a. A portion may be waived
13. DNA testing ($128)
    a. <u>No</u> statutory provision for waiver
14. Confidentiality program ($28, imposed on stalking or any crime with underlying factual basis of domestic violence)
    a. May be waived
15. Any other fees or surcharges (examples below)
    a. Alcohol/Drug Evaluation Costs ($200)
        i. <u>No</u> statutory provision for waiver
    b. Persistent Drunk Driver Surcharge ($100-500)
        i. May be waived
    c. Standardized substance abuse assessment cost (screening only $45, full assessment $75)
        i. May be waived
    d. Rural alcohol and substance abuse surcharge ($1-10 based on offense)
        i. May be waived
    e. Court cost (docket fee) $40
        i. <u>No</u> statutory provision for waiver
    f. Genetic testing surcharge ($2.50)
        i. May be waived
    g. Public Defender fee ($25.00)

i. May be waived

h. Extradition costs (if ordered)

16. Repayment of all or part of any reward paid by a crime stopper organization that led to the defendant's arrest and conviction.

Table 7. Drug offender surcharges in July 2010

Drug Offense	Surcharge
Class 2 Felony	$4,500
Class 3 Felony	$3,000
Class 4 Felony	$2,000
Class 5 Felony	$1,500
Class 6 Felony	$1,250
Misdemeanor 1	$1,000
Misdemeanor 2	$600
Petty	$200

The fees and surcharges levied against drug offenders generate approximately $4-5M for treatment services and staff costs related to conducting assessments, according to the Division of Probation Services (DPS). The funds are shared by DPS, DOC, the Department of Human Services, and the Division of Criminal Justice for use in probation, prison, treatment and community corrections, respectively.

THE MECHANICS OF TREATMENT FUNDING IN COLORADO

The following is a description of the general mechanism by which the money flows from statutory penalty schedule to treatment providers.

1. Statute identifies fees, fines, surcharges
2. Each judge imposes costs (fines, fees, surcharges) or waives at sentencing
3. Conditions of probation reflect imposition of these costs
4. Offenders on probation meet with collection investigator specialist to complete a financial background investigation and to develop a feasible payment plan
5. Probation Officer and Collection Investigator monitors to ensure the offender makes monthly payments to the Court
6. Judicial philosophy is to ensure that the probation officer works with each offender over the course of the supervision period to meet the court order- which means payment amounts may be adjusted to reflect changes in circumstances
7. Monthly financial reconciliation reports are prepared by each of the District Court Clerks
8. The Judicial Controller deposits all revenue collected by the Courts with the State Treasurer for crediting to the appropriate statutory fund
9. The General Assembly annually appropriates funds to state government
10. The Division of Probation Services allocates funds to each probation department from the Offender Treatment and Services cash fund appropriation

Each probation department pays treatment providers for the delivery of a variety of treatment and other services.

Collection rates. A defendant is responsible to pay all court ordered costs at the time of sentencing. It is the exception that all ordered costs are paid at sentencing so most offenders meet with a Collection Investigator to establish a payment plan that will allow the offender to pay all ordered costs prior to discharge from probation supervision. Overall, while there is variation across judicial districts, approximately 70% of the fees, fines and surcharges ordered are eventually collected by the courts although about 30% of the assessed total due is collected in a given year, according to probation officials. DPS officials assert that the Division has established a culture that encourages probation officers to consider and assess each person's individual circumstances and work with probationers to collect the court ordered costs prior to the end of the offender's sentence. Generally, individuals are least able to meet their financial obligations during the first months of supervision, according to probation officials. It is during this period that Offender Treatment and Services (OTS) funds may be used to pay for drug testing and substance abuse evaluations and treatment.

Collections for restitution, child support and other fees are also made while offenders are serving sentences in community corrections halfway houses, in prison, and on parole.

Table 8. Approximately $34 million in state funding is directed toward behavioral health services for justice involved individuals in Colorado

AGENCY/PROGRAM	SOURCE OF FUNDS	NUMBER SERVED PER YEAR (APPROX)	FUNDING ALLOCATED FOR TREATMENT SERVICES	COMMENTS
DIVISION OF PROBATION SERVICES				
OFFENDER TREATMENT AND SERVICES FUND (ADULTS AND JUVENILES)	Offender fees and surcharges		**$10,932,013 (FY 10)**	
Substance abuse treatment			$2,495,778	
Drug testing			$1,176,242	
Mental health treatment (including medication)			$683,170	
General medical			$95,746	
Emergency housing			$239,865	
Transportation assistance			$229,458	
Sex offender treatment, assessments, polygraphs			$3,016,196	
Domestic violence treatment			$571,501	
Other (EHM, GPS, Educ/voc assistance, interpreters, incentives, restorative justice, EBP research, building rural tx capacity initiative, incentives)			$1,418,051	
SENATE BILL 03-318	**General Fund**	**2,000**	**$2,120,000**	**Targets prison-bound offenders; priority to direct funds toward drug courts**
ALCOHOL AND DRUG DRIVING PROGRAM	**$200 offender fee**	**30,000**	**Approx $5M**	**Pays for evaluations not treatment**

DIVISION OF BEHAVIORAL HEALTH				
DIVISION OF BEHAVIORAL HEALTH (ADULTS AND JUVENILES)		**7,442**	**$10,572,787 (FY 10)**	**Funding specific to offenders**
SB 07-97 Arapahoe/Douglas Mental Health Network, $285,236; Aurora Mental Health Center, $285,237; Colorado West Regional Mental Health Center, $258,400; Community Reach Center, $285,237; Jefferson Center for Mental Health $449,768; Larimer Center for Mental Health, $285,237, Mental Health Center serving Boulder and Broomfield Counties; $285,237; Mental Health Center of Denver; $499,163; North Range Mental Health Center, $285,237: Pikes Peak Behavioral Health, $499,163; Spanish Peaks Mental Health, $285,236.	**12% of the tobacco litigation settlement funds**	**2,100**	**$3,803,000 (FY 11)**	
FAMILY ADVOCACY DEMONSTRATION PROGRAM	**Tobacco litigation**	**50**	**$157,000 (FY 10)**	**Serves at-risk youth and their families**
STIRRT (SHORT TERM INTENSIVE RESIDENTIAL REMEDIATION TREATMENT)	**General Fund**	**1,400**	**$2,791,874 (FY 10)**	**Serves high-risk prison-bound offenders**
STIRRT CONTINUING CARE (AFTERCARE)	**General Fund**	**760**	**$361,536 (FY 10)**	**Serves high-risk prison-bound offenders**
STIRRT ANCILLARY SERVICES (TRANSPORTATION, MEDICATION)	**General Fund**	**Not available**	**$211,000 (FY 10)**	**Serves high-risk prison-bound offenders**
ARTS/PEER 1/THE HAVEN	**General Fund**	**53**	**$321,849**	**Therapeutic community services**
SSC (STRATEGIES FOR SELF-IMPROVEMENT AND CHANGE)	**General Fund**	**27,179 client sessions; 566 treatment slots in a 48 week program**	**$951,288**	

PERSISTENT DRUNK DRIVER FUND	**Cash fund from $100-$500 fines imposed on all DUI/DWAI convictions**	**1,000 detox services; 2,100 for education, therapy and ignition interlock for the indigent**	**$577,000**	**Total fund is $1.1M; DOT, DOR, Judicial, and DBH coordinate prevention, treatment, and other programs.**
STAR-TC AT CROSSROADS TURNING POINTS IN PUEBLO	**General Fund**	**32**	**$600,000**	**Residential program lasting 6-9 months**
OFFICE OF COMMUNITY CORRECTIONS, DIVISION OF CRIMINAL JUSTICE				
OFFICE OF COMMUNITY CORRECTIONS	**General Fund**	**922**	**$7,349,751 (FY 11)**	**Base per diem is $37.74 for residential and $5.12**
MENTAL HEALTH BEDS	General Fund	160	$2,713,410	$33.02 differential **(additional per diem)**
JOHN EACHON REENTRY PROGRAM (JERP)	General Fund	12	$240,000	Serves transition offenders with behavioral health problems $52.80 differential **(additional per diem)**
INTENSIVE RESIDENTIAL TREATMENT PROGRAM	General Fund	208	$1,039,334	$17.78 differential **(additional per diem)**
MODIFIED THERAPEUTIC COMMUNITIES	General Fund	200	$2,851,380	$14.34 differential **(additional per diem)**
OUTPATIENT THERAPEUTIC COMMUNITY	General Fund	125	$505,627	$13.32 differential **(additional per diem)**
FY 2011 LEGISLATION THAT EXPANDED FUNDING FOR BEHAVIORAL HEALTH TREATMENT (APPROXIMATELY $5,152,600)				
HOUSE BILL 10-1347: MINIMUM PERSISTENT DRUNK DRIVING SURCHARGE INCREASED FROM $50 TO $100.	General Fund		$550,000	
HOUSE BILL 10-1352: MODIFIED PENALTIES FOR PERSONAL USE AND POSSESSION OF CONTROLLED SUBSTANCES	General Fund		$1,468,196	DCJ to estimate annual cost savings in future years

HOUSE BILL 10-1360: REDUCED PENALTIES FOR TECHNICAL VIOLATIONS AND DIRECTED COST SAVINGS TO COMMUNITY CORRECTIONS TRANSITION OFFENDERS AND THOSE ON PAROLE	General Fund		$1,545,409 to community corrections $2,557,225 for DOC	**CC:** 30 IRT beds; 20 MH beds; 10 TC beds; 10 sex offender beds **DOC:** wraparound services, outpatient MH services, another $500,000 for job/employment services
HOUSE BILL 10-1284: IMPOSES A SALES AND USE TAX ON MEDICAL MARIJUANA. THE FIRST $2,000,000 IS APPROPRIATED TO THE DEPARTMENT OF HUMAN SERVICES AND HEALTH CARE, POLICY AND FINANCING TO FUND SUBSTANCE ABUSE PROGRAMS.			$2,000,000	The first $2,000,000 in taxes and fees is appropriated to the Department of Human Services and Health Care, Policy and Financing to fund substance abuse programs; $1M each for co-occurring services and SBIRT.
ADDITIONAL INFORMATION				
59 PROBLEM SOLVING COURTS • 20 adult drug courts in 19 counties; • 10 juvenile drug courts in 9 counties; • 11 family/dependency/neglect drug courts in 11 counties; • 2 adult mental health courts; • 1 juvenile mental health court; • 7 DUI courts and 1 criminal/DUI hybrid court; • 6 truancy courts; and • 1 veterans/trauma court.				

Note: Does not include prison treatment.

Division of Probation Services

Offender treatment and services

In FY 2010, 70,000 adults were under the jurisdiction of the Division of Probation Services. The General Assembly appropriated $10.9M to Probation Services from revenue collected in three offender- pay cash funds: the Offender Services Cash Fund, the Drug Offender Surcharge Cash Fund, and the Sex Offender Surcharge Cash Fund These monies are aggregated and appropriated under the Offender Treatment and Services (OTS) line in the annual appropriation bill (Long Bill). The OTS funds are utilized to assist with the range of needs facing *both juveniles and adults*. Those convicted of sex crimes comprise seven percent of the probation population, yet consume nearly one-third of these funds.

In FY 2010, 70,000 adults were under the jurisdiction of the Division of Probation Services. The General Assembly allocated to DPS $10.9M from offender payments. These monies go to the Offender Treatment and Services Fund to assist with the range of needs facing both juveniles and adults. Those convicted of sex crimes comprise seven percent of the probation population, yet consume nearly one-third of these funds.

Over one-third (38.7%) of the budget went to substance use disorder treatment and drug testing. Another 35% was used to provide adult and juvenile sex offender treatment, assessments and monitoring. Funding was also used for mental health treatment and medication ($683,170), non-mental health medication and other medical issues ($95,746), domestic violence treatment ($571,501), electronic home monitoring ($249,614), emergency housing and transportation assistance ($469,323), interpreter services, incentives (used mostly by problem solving/accountability courts), restorative justice, and education and vocational assistance. Some funds are transferred to DPS from the Division of Behavioral Health and directed toward alcohol treatment and automobile interlocks. Finally, the Chief Probation Officers dedicated a portion of the appropriation to build treatment capacity in rural areas. This initiative was successful: 11 new sex offender and domestic treatment providers were established by removing or reducing barriers to becoming approved providers.

Senate Bill 03-318. In FY 2003, the General Assembly passed SB 03-318 which decreased the felony penalties associated with possession and use of smaller amounts of illicit substances. The Colorado Interagency Advisory Committee on Adult and Juvenile Correctional Treatment (IAC) issued a report in January 2007 documenting a cost savings in excess of $2.2M resulting from reduced prison commitments. Consequently, in FY 2008, the General Assembly appropriated $2.2 million to the Judicial Department to be allocated to local judicial districts for the purposes of filling local gaps in substance use disorder treatment services for offenders. In FY 2009 and FY 2010, $2.1M was allocated each year for SB- 318 programming. These funds are intended to target individuals who would otherwise be prison-bound. Finally, SB- 318 prioritized drug courts and these funds are the only source of state funding for drug courts.

The Interagency Advisory Committee on Adult and Juvenile Correctional Treatment has representatives from the following entities:

- Department of Human Services
- Division of Behavioral Health
- Division of Youth Corrections
- Department of Corrections
- Department of Public Safety
- Division of Criminal Justice

- State Board of Parole
- State Court Administrator's Office
- Division of Probation Services

The Interagency Advisory Committee on Adult and Juvenile Correctional Treatment has representatives from the following entities:

- *Department of Human Services*
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- *Department of Public Safety*
- *Division of Criminal Justice*
- *State Board of Parole*
- *State Court Administrator's Office*
- *Division of Probation Services*

Under the SB 03-318 legislation, judicial districts were to establish a Drug Offender Treatment Board to identify local issues and propose targets for treatment expansion and/or enhancement. Most districts indicated their goals were to reduce the prevalence of substance use disorder among offenders and to reduce recidivism rates. Ten districts identified methamphetamine use as a significant local problem with eight of these districts proposing to use SB 318 funds to establish or enhance methamphetamine specific treatment options. Additionally, ten districts proposed to direct funding to enhance treatment services for drug court participants.

These funds, to be allocated annually to judicial districts' drug offender treatment boards, are distributed according to a formula based on population and the number of use and possession drug case filings, although each district receives a minimum of $25,000. The statute requires 80% of the yearly allocation to be distributed from Judicial's budget to local boards based on spending plans developed by the local boards and approved by the interagency task force. The DPS prepares a report every January for the House and Senate Judiciary Committees that documents the distribution of funds. The following information is derived from these reports.

In FY 2008, 985 clients were admitted to SB 318 services (85% were adults). By the end of the fiscal year, 297 had completed treatment, and 70% of these completed successfully (688 remained in treatment). Nearly one-quarter (24%) of SB 318 clients were in drug courts. Nearly three-quarters (73%) were in weekly (46%), enhanced (16%) or intensive (11%) outpatient treatment; 2% were in STIRRT, 9% were in IRT and 1% were in TCs (another 14% were in "other" evidenced-based treatment).

By March 31, 2010, representing three-quarters of the fiscal year, SB 318 funding had served 1,768 new admissions; 11% were drug court clients. Of the new clients admitted into treatment between January 1 and March 31, 2010, 74% were in outpatient treatment (consistent with past reports) but participation in IRT increased to 20% of the SB 318 clientele for that quarter. Programs reported 1,572 program completions and an 87% success rate over the 9-month period.

In FY 2009, the General Assembly appropriated $2.2M, and the districts expended 91% of those funds; 1,902 individuals completed treatment, and 85% of them successfully completed the treatment episode. New admissions into SB 318-funded services totaled 2,311; 89% of these were adults. Two-thirds of all new admissions went into weekly outpatient treatment, and the remainder went into more intensive treatment including 40 clients in therapeutic communities or transitional residential placements. Participation in IRT increased from 9% in FY 2008 to 13% in FY 2009.[175]

By March 31, 2010, representing three-quarters of the fiscal year, SB

[175] Division of Probation Services. (January 2010). *Annual report to the House and Senate Judicial Committees: Report provided as required by C.R.S. 18-19-104(4).* Denver, CO: State Court Administrator's Office, Judicial Department.

318 funding had served 1,768 new admissions; 11% were drug court clients. Of the new clients admitted into treatment between January 1 and March 31, 2010, 74% were in outpatient treatment (consistent with past reports) but participation in IRT increased to 20% of the SB 318 clientele for that quarter. Programs reported 1,572 program completions and an 87% success rate over the 9-month period.

Information required in the mandated annual SB 318 report is quite limited. Additional information would be valuable to better understand the population served and the services provided, including length of treatment, length of court sentence, risk/needs level of the population served and the extent to which these match the type of services provided, and details regarding successful and unsuccessful termination.

An interesting component of the ADDS program is the web-based electronic case management system called the Treatment Management System (TMS).

Treatment providers enter status data weekly about each offender. Probation officers can virtually review each case rather than relying on traditional telephone and fax/mail communication and paper reports. It provides nearly real time information about treatment attendance and compliance. This system is being expanded by the Division of Behavioral Health to include all DBH-licensed substance abuse treatment providers working with all offenders.

Alcohol and Drug Driving Safety Program (ADDS)

By statute, the judicial department administers in each judicial district an alcohol and drug driving safety program that provides pre- and post-sentence alcohol and drug evaluations on individuals convicted of driving under the influence of, or impaired by, drugs or alcohol. The program conducts alcohol and drug evaluations and makes treatment recommendations and provides supervision and monitoring of those whose probation conditions require completion of a treatment program. C.R.S. 42-4-1301(4)(a) requires offenders to pay $200 into a fund that pays for evaluations only, not treatment. This $200 fee generates approximately $5M annually which pays for 73 employees across the state to complete the 27,000-28,000 annual evaluations and monitor compliance with court orders.

An interesting component of the ADDS program is the web- based electronic case management system called the Treatment Management System (TMS). The TMS was designed and implemented by the division formerly known as the Alcohol and Drug Abuse Division (ADAD), now an integrated part of the Division of Behavioral Health (DBH) in the Department of Human Services. Any agency offering substance use disorder treatment services to the courts must be licensed by DBH and, once licensed, are currently required to use the TMS for ADDS cases. Treatment providers enter status data weekly about each offender. Probation officers can virtually review each case rather than relying on traditional telephone and fax/mail communication and paper reports. It provides nearly real time information about treatment attendance and compliance. This system is being expanded by the Division of Behavioral Health to include all DBH-licensed substance use disorder treatment providers working with all offenders.

Problem solving/accountability courts

Colorado has 59 problem solving/accountability courts across the state serving adult and juvenile offenders. As of July 1, 2010, the following specialty courts were implemented in Colorado:

- 20 adult drug courts in 19 counties;
- 10 juvenile drug courts in 9 counties;
- 11 family/dependency/neglect drug courts in 11 counties;

- 2 adult mental health courts (Denver and Arapahoe);
- 1 juvenile mental health court in Golden;
- 7 DUI courts and 1 criminal/DUI hybrid court (Aspen);
- 6 truancy courts; and
- 1 veterans/trauma court (Colorado Springs).

In general, problem solving/accountability courts are modeled after drug courts. Drug courts have been the focus of extensive evaluation, including costs and benefits, since their inception in 1989. Both meta-analyses and systematic reviews have found drug courts to reduce recidivism and return $1.74 in benefits for every $1 in costs.[176]

Division of Behavioral Health

In FY 2010, the Division of Behavioral Health (DBH) was allocated $10.6M in funding to provide services to adults and juveniles in the criminal justice system.[177] Several years ago, the Division of Probation Services requested that its multiple cash funded treatment lines be combined to maximize the Division's flexibility, effective use of available funds and reduce redundancy. Similar streamlining has not been applied to DBH funding, as will become apparent as the individual funds that pertain to justice clients are described below.

Senate Bill 07-097. This bill was developed in response to Colorado's significant growth in the demand for community-based mental health services for those with mental illness involved in local and state criminal justice systems. This program provides behavioral health services for juveniles and adults involved in the justice system. The General Assembly allocated $4.1M in FY 2010 to provide services for the purposes of reducing recidivism rates, improving psychiatric well-being, reducing substance abuse, and improving family dynamics (for juvenile offenders) among offenders with mental illness. DBH estimates these funds served 2,122 adults and juveniles with behavioral health disorders who were transition from incarceration, on parole, probation, or in a jail diversion program in 2010.

Two of the goals of the SB 97 funds include increasing the capacity of clinicians to work more effectively with offender populations, and providing for long term, local sustainability of programs for offenders. Both of these legislative goals have been discussed by the Commission and the Treatment Funding Working Group as critical areas of need. The SB 97 monies pay for the following services at 11 mental health center sites:[178]

- Integrated Dual Diagnosis Treatment (IDDT)
- Assertive Community Treatment (ACT)
- Cognitive Behavioral Therapy (CBT)
- Medication Management
- Multi-Systemic Therapy (MST)

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[176] See Przybylski, R. (2008). *What works: Effective recidivism reduction and risk-focused prevention programs.* Denver, CO: RKC Group. Written for the Division of Criminal Justice. Available at http://dcj.state.co.us/ors/pdf/docs/WW08_022808.pdf.

[177] This funding includes approximately $508,000 for the TurnAbout program which terminated in July 2010.

[178] The sites are: Jefferson Center for Mental Health ($449,768), North Range Behavioral Health ($285,237), Mental Health Center of Denver ($499,163), Arapahoe/Douglas Mental Health Network ($285,236), Mental Health Center serving Boulder and Broomfield Counties ($285,237), Spanish Peaks Mental Health Center ($285,236), Community Reach Center ($285,237), Pikes Peak Mental Health Center ($499,163), Colorado West Mental Health Center ($258,400), Aurora Mental Health Center ($285,237), Larimer Center for Mental Health ($285,237).

- Supportive Housing
- Supportive Employment Services
- Case Management
- Aggression Replacement Training (ART)
- Intensive Case Management
- Functional Family Therapy (FFT)
- Dialectical Behavioral Therapy
- Wraparound Services
- Trauma Recovery and Empowerment
- Individual Psychotherapy
- Crisis Intervention Training (CIT)

The Division of Behavioral Health expects the FY 2011 allocation to total approximately $3.8M. The source of this money is 12% (annually) of the Tobacco Litigation Settlement cash fund.[179] Please see Appendix F for DBH's summary of the programs offered by each mental health center, along with contact information.

Family Advocacy Demonstration Program. This program, established in House Bill 07-1057, was an initiative of the Task Force for the Continuing Examination of the Mentally Ill in the Justice System (MIJS). The intent of the program was to provide strength-based family-driven advocacy for youth with mental health and substance use problems. The annual appropriation of approximately $157,000 served about 56 youth, and the demonstration project will terminate at the end of FY 2011.

Short Term Intensive Residential Remediation Treatment (STIRRT). Four programs operating in Denver (Arapahoe House), Grand Junction (Mesa County Community Corrections), Pueblo (Crossroad Turning Point), and Ft. Collins (Larimer County Community Corrections) serve approximately 1,424 high risk adult offenders who would otherwise—due to supervision failures—be prison-bound. STIRRT is a 14-day residential program followed by continuing care, with an FY 2010 appropriation of $2.8M. The residential component is intended as a stabilizing measure before beginning up to nine months of continuing care. Continuing care was at the offender's expense until FY 2008 when funding was appropriated to pay for these services. In FY 2010 $362,000 was appropriated for continuing care for 766 individuals, however, efforts to place participants into continuing care were generally unsuccessful, as discussed in the following section when findings from DCJ's STIRRT evaluation are presented. DBH also received $211,000 for STIRRT ancillary services, including psychiatric medication, wraparound case management services, and transportation.

ARTS/Peer1/The Haven. The Haven and Peer 1 are part of the University of Colorado Health Sciences Center, School of Medicine, Addiction Research and Treatment Services (ARTS). Peer 1 is a comprehensive therapeutic community for adult men. Like The Haven, the average residential stay is 9 to 12 months. Peer 1 has an 82-bed capacity. The Division of Behavioral Health received $275,706 in FY 2010 to pay an enhancement rate specifically for approximately 53 offenders per day.

[179] Colorado Division of Behavioral Health. (No Date). Program Profile: Offender Mental Health Services Initiative—SB 07-97; Colorado Division of Behavioral Health. (No Date). SB 07-097 Offender Mental Health Services Initiative: Background and Overview.

The Haven. The Haven is an 89-bed modified therapeutic community (MTC) for women and mothers and their infants. The program offers long-term (9 to 12 months of residential) intensive treatment for clients with addiction. In FY 2010, DBH received $46,143 for services at The Haven.

Strategies for Self-Improvement and Change (SSC). This manualized cognitive behavioral program has three phases and is 48-50 weeks long. The Drug Offender Surcharge Cash Fund is the source of the funding, and in FY 2010, the General Assembly appropriated $951,288 for 27,179 client sessions. SSC is perhaps the state's most commonly used program for substance-abusing offenders however, as discussed in the next section, the single evaluation of SSC found an overall 12- and 24-month recidivism-to-DOC rate of 37.8% and 49.5%, respectively.[180]

Persistent Drunk Driver (PDD). This cash fund is generated from a $100-500[181] surcharge assessed on those convicted of DWAI and DUI. State law (C.R.S. 42-1-102 (68.5)) defines *Persistent Drunk Drivers* as those who were convicted of or had their driver's license revoked for two or more alcohol related driving violations; who continues to drive after a driver's license or driving privilege restraint has been imposed for one or more alcohol related driving offenses; or who drives a motor vehicle with a BAC of .17% or greater. Among the objectives of the fund, it is intended to pay a portion of the costs for required interventions or treatment services for persistent drunk drivers who are unable to pay for the required intervention or treatment services. DBH and the Judicial Branch, plus the Departments of Transportation and Revenue, are responsible for coordinating the PDD-funded programs.

In FY 2010, the allocation to DBH was $1.1M. Of that, $265,000 was allocated to detoxification services for approximately 1,000 clients. Another $312,000 was targeted to PDD offenders for the costs of Level ll education, Level ll therapy, and ignition interlock. The fund also supports programs intended to deter persistent drunk driving and education the general public, with particular emphasis on the education of young drivers, regarding the dangers of persistent drunk driving.

STAR-TC. Crossroads Turning Point in Pueblo includes a 24-bed women's therapeutic community program. The program is 6 to 9 months in length and is designed to help participants eliminate drug use and antisocial behavior. DBH received $600,000 in FY 2010 to provide services for 32 women at STAR-TC.

Office of Community Corrections

The Office of Community Corrections (OCC) in the Division of Criminal Justice is the state administrative agency for the state's community corrections system. Community Corrections in Colorado is a system of specific halfway house facilities that provide both residential and non-residential services to convicted offenders. Although these facilities receive state funds they are located and managed by local communities. The General Assembly sets a daily rate (a base per diem) for which the halfway house is reimbursed. In FY 2011, the rate for residential beds is $37.74 and the rate for non-residential "slots" is $5.12. A limited number of halfway house beds are targeted to special populations and are reimbursed at a higher rate. The rate differential ranges from approximately $14.00 per day to $33.00. In FY 2010,

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[180] Booth, R.E. & Lehman, W.E.K. (2009). *Strategies for Self-Improvement and Change and Recidivism Following Treatment*. Signal Behavioral Health Network. The treatment manual is available from Amazon, at http://www.amazon.com/Criminal-Conduct-Substance-Abuse-Treatment/dp/0761909443. The study was funded by Signal Behavioral Health Network, a DBH-designated Managed Service Organization.

[181] The minimum surcharge was increased from $50 to $100 in House Bill 10-1347 and is expected to generate $250,000. The additional revenue is targeted to alcohol treatment programs for indigent and incarcerated offenders, ignition interlock devices for indigent offenders, and continuous monitoring technology or devices for indigent offenders. The Persistent Drunk Driver Committee has oversight of the fund and establishes criteria for spending.

Community Corrections will direct approximately $7.4M in differential per dia rates to the treatment of individuals with behavioral health problems.

Mental health beds. Using a Residential Dual Diagnosis Treatment (RDDT) evidence-based model developed in collaboration with the DBH, the Division of Probation Services and DOC, the OCC pays 105 residential beds for offenders with both Axis I diagnoses and significant substance abuse problems. Five facilities across Colorado have RDDT beds and serve about 160 clients per year for a cost of $2,713,410, including the base per diem.

John Eachon Reentry Program (JERP). In collaboration with the Jefferson Center for Mental Health, Intervention Community Corrections Services (ICCS) in Lakewood operates the eight bed JERP program for offenders with serious mental illness who are transitioning from prison. This program provides both residential and some aftercare services, including medication. The program is supervised by the OCC, DBH, and DOC. JERP serves about 12 offenders per year for a cost of $240,000.

Intensive Residential Treatment program. The Intensive Residential Treatment (IRT) program is a closed 90-day pilot that uses a collaboratively developed, evidence-based model in which 52 beds are provided for clients with significant substance abuse issues that have been referred to outpatient treatment. IRT clients are initially enrolled in the program, and then proceed to other community corrections programs, where they are intended to have continued outpatient treatment. This project is supervised by the OCC and the DBH. Two programs currently offer regular IRT programming, serving a maximum of 208 clients annually at a cost of $1,039,334.

Modified therapeutic communities. Two modified therapeutic communities (TCs) provide services to community corrections offenders at three programs in Colorado. This treatment milieu uses intensive, immersive, peer-based communities to treat substance use disorder that is referred to outpatient and less expensive inpatient treatment programs. Typically, TC clients are high-needs offenders whose criminogenic behavior is associated with substance abuse. A combined capacity of 150 inpatient slots will serve more than 200 offenders each year at an annual cost of $2,851,380.

Outpatient therapeutic community. Therapeutic Community (TC) offenders who "graduate" from residential treatment often require continued services as outpatients. A combined capacity of 103 slots will serve about 125 offenders each year at a cost of $505,627.

House Bill 10-1360 Parole Technical Violator Services. Effective July 1, 2010, HB-1360 monies are intended to provide dual diagnosis, IRT and modified therapeutic community services specifically designed to prevent parole violators from requiring a return to prison. Services are available to failing parolees in existing Residential Dual Diagnosis Treatment, Intensive Residential Treatment and Modified Therapeutic Communities as follows:

- IRT for failing parolees: 30 beds serving a total of 160 failing parolees a year at an annual cost of $599,616.
- RDDT for failing parolees: 20 beds serving an estimated 30 offenders per year at an annual cost $311,344.
- TC for failing parolees: 10 beds serving approximately 14 offenders per year at an annual cost $141,363.

In addition to these beds, HB-1360 makes available 10 beds for failing sex offender parolees serving an estimated 13-14 offenders per year at an annual cost $260,000.

Booking fees. Another source of funding for behavioral health treatment is in the form of jail booking fees. Per C.R.S. 30-1-104(1)(n), county jails are allowed to charge a processing fee of up to $30 to each convicted inmate committed or discharged from the facility, and 20% (up to $6 per individual booked into jail) must, by statute [C.R.S. 30-1-119(2)(a)(I)], be directed toward the administration of a community-based treatment program offender behavioral health services if the county has such a program. Each sheriff may use the remaining balance of the booking fee for facility operations.

2010 Legislation expanded behavioral health treatment resources

Legislation passed in the FY2010 legislative session that directed an additional $8M in finding into behavioral health services. Four bills modified criminal sanctions in ways that will generate cost savings to the state, and a sixth bill placed a sales tax on medical marijuana and directed a portion of the funds toward substance use disorder programs. These bills are described below.

House Bill 10-1347. Among other things, this bill increased the Persistent Drunk Driver Surcharge from $50 to $100, and half of the additional revenues will be deposited into the Persistent Drunk Driver Fund (discussed earlier in this section). This is expected to generate over $550,000 per year when fully implemented after the first year.

House Bill 10-1352. Modified the penalties for personal use and possession of controlled substances. The bill lowers penalties for certain offenses, but raises surcharges imposed on convictions for many drug-related crimes. It is estimated that the bill will result in a decrease of $1,468,196 in revenue to the State's General Fund, but a commensurate increase in revenue to the Drug Offender Surcharge Fund.

House Bill 10-1360. This bill reduced the penalties for technical violations and directed the cost savings to community corrections transition offenders and those on parole:

- $1,545,409 for community corrections treatment beds[182]
    - 30 beds for IRT and follow-up outpatient treatment
    - 20 mental health beds
    - 10 therapeutic community beds
    - 10 sex offender beds
- $2,057,225 for offenders reentering the community from the Department of Corrections
    - Wrap around services for parolees
    - Outpatient mental health services
    - Another $500,000 was allocated for job training and employment services

House Bill 10-1284. This bill imposes a sales and use tax on medical marijuana. The first $2,000,000 is appropriated to the Departments of Human Services (DHS) and Health Care, Policy and Financing (HCPF) to fund co-occurring services and screening and brief intervention (SBIRT), respectively.

[182] Outlined above under the discussion of Community Corrections.

State funds only

Note that the information provided here reflects only state funding. It does not include federal block grant funds for behavioral health services, other grant funding directed toward offender treatment, local resources, insurance, or self-pay. Additional federal dollars are directed specifically to DUI/DWAI education and treatment.

Summary

The funding information presented here should be considered in the context of the information presented in Section Three on the science of addiction, relapse and recovery. Experts suggest that the traditional acute (rather than chronic) care approach to behavioral health encourages the idea that those entering treatment should be cured and able to maintain lifelong abstinence following a single episode of specialized treatment. Accordingly, policy makers allocate limited public health dollars for behavioral health treatment, insurers restrict the number of patient days and visits covered, treatment centers often have no infrastructure for ongoing monitoring, and families and the public become impatient when individuals relapse.[183]

Individuals involved in the criminal justice system in Colorado who need behavioral health treatment are most likely to meet criteria for regular outpatient treatment since 90% of programs provide these services. However, because of the abundance of regular outpatient services, individuals who need more intense services may not receive the level of intervention they need, yet the gap in services is difficult to quantify due to lack of data. Including the new moneys allocated in the FY 2010 legislative session, Colorado directs (or will direct, when the newly allocated funds are fully available) approximately $34M from the state General Fund to the behavioral treatment of adults and juveniles in the justice system. Additional resources are provided by federal and local funds, including grant dollars from private and government sources, but these monies are difficult to track and are not included in this report. The funding information presented in this chapter is summarized in Table 8.

[183] McLellan, A.T., Lewis, D.C. O'Brien, C.P. & Kleber, H. Drug dependence, a chronic medical illness. *Journal of the American Medical Association, 284*, 1689-1695; Institute of Medicine (2006); Mark Stanford, Director of Medical and Clinical Services, Department of Alcohol & Drug Services, Addiction Medicine Division, Santa Clara County Health & Hospital System, reviewing the literature in an editorial in the San Jose *Mercury News*, December 29, 2008.

APPENDICES

Appendix A
Addiction is a brain disease

Addiction Is a Brain Disease[1]

By
ALAN I. LESHNER

Alan I. Leshner is former director of the National Institute on Drug Abuse at the National Institutes of Health.

Greater progress will be made against drug abuse when our strategies reflect the full complexities of the latest scientific understanding.

The United States is stuck in its drug abuse metaphors and in polarized arguments about them. Everyone has an opinion. One side insists that we must control supply, the other that we must reduce demand. People see addiction as either a disease or as a failure of will. None of this bumpersticker analysis moves us forward. The truth is that we will make progress in dealing with drug issues only when our national discourse and our strategies are as complex and comprehensive as the problem itself.

A core concept that has been evolving with scientific advances over the past decade is that drug addiction is a brain disease that develops over time as a result of the initially voluntary behavior of using drugs. The consequence is virtually uncontrollable compulsive drug craving, seeking, and use that interferes with, if not destroys, an individual's functioning in the family and in society. This medical condition demands formal treatment.

We now know in great detail the brain mechanisms through which drugs acutely modify mood, memory, perception, and emotional states. Using drugs repeatedly over time changes brain structure and function in fundamental and long-lasting ways that can persist long after the individual stops using them. Addiction comes about through an array of neuroadaptive changes and the laying down and strengthening of new memory connections in various circuits in the brain. We do not yet know all the relevant mechanisms, but the evidence suggests that those long-lasting brain changes are responsible for the distortions of cognitive and emotional functioning that characterize addicts, particularly including the compulsion to use drugs that is the essence of addiction. It is as if drugs have highjacked the brain's natural motivational control circuits, resulting in drug use becoming the sole, or at least the top, motivational priority for the individual. Thus, the majority of the biomedical community now considers addiction, in its essence, to be a brain disease: a condition caused by persistent changes in brain structure and function.

This brain-based view of addiction has generated substantial controversy, particularly among people who seem able to think only in polarized ways. Many people erroneously still believe that biological and behavioral explanations are alternative or competing ways to understand phenomena, when in fact they are complementary and integratable. Modern science has taught that it is much too simplistic to set biology in opposition to behavior or to pit willpower against brain chemistry. Addiction involves inseparable biological and behavioral components. It is the quintessential biobehavioral disorder.

[1] From: http://www.issues.org/17.3/leshner.htm.

Many people also erroneously still believe that drug addiction is simply a failure of will or of strength of character. Research contradicts that position. However, the recognition that addiction is a brain disease does not mean that the addict is simply a hapless victim. Addiction begins with the voluntary behavior of using drugs, and addicts must participate in and take some significant responsibility for their recovery. Thus, having this brain disease does not absolve the addict of responsibility for his or her behavior, but it does explain why an addict cannot simply stop using drugs by sheer force of will alone. It also dictates a much more sophisticated approach to dealing with the array of problems surrounding drug abuse and addiction in our society.

The essence of addiction

The entire concept of addiction has suffered greatly from imprecision and misconception. In fact, if it were possible, it would be best to start all over with some new, more neutral term. The confusion comes about in part because of a now archaic distinction between whether specific drugs are "physically" or "psychologically" addicting. The distinction historically revolved around whether or not dramatic physical withdrawal symptoms occur when an individual stops taking a drug; what we in the field now call "physical dependence."

However, 20 years of scientific research has taught that focusing on this physical versus psychological distinction is off the mark and a distraction from the real issues. From both clinical and policy perspectives, it actually does not matter very much what physical withdrawal symptoms occur. Physical dependence is not that important, because even the dramatic withdrawal symptoms of heroin and alcohol addiction can now be easily managed with appropriate medications. Even more important, many of the most dangerous and addicting drugs, including methamphetamine and crack cocaine, do not produce very severe physical dependence symptoms upon withdrawal.

What really matters most is whether or not a drug causes what we now know to be the essence of addiction: uncontrollable, compulsive drug craving, seeking, and use, even in the face of negative health and social consequences. This is the crux of how the Institute of Medicine, the American Psychiatric Association, and the American Medical Association define addiction and how we all should use the term. It is really only this compulsive quality of addiction that matters in the long run to the addict and to his or her family and that should matter to society as a whole. Compulsive craving that overwhelms all other motivations is the root cause of the massive health and social problems associated with drug addiction. In updating our national discourse on drug abuse, we should keep in mind this simple definition: Addiction is a brain disease expressed in the form of compulsive behavior. Both developing and recovering from it depend on biology, behavior, and social context.

It is also important to correct the common misimpression that drug use, abuse, and addiction are points on a single continuum along which one slides back and forth over time, moving from user to addict, then back to occasional user, then back to addict. Clinical observation and more formal research studies support the view that, once addicted, the individual has moved into a different state of being. It is as if a threshold has been crossed. Very few people appear able to successfully return to occasional use after having been truly addicted. Unfortunately, we do not yet have a clear biological or behavioral marker of that transition from voluntary drug use to addiction. However, a body of scientific evidence is rapidly developing that points to an array of cellular and molecular changes in specific brain circuits. Moreover, many of these brain changes are common to all chemical addictions, and some also are typical of other compulsive behaviors such as pathological overeating.

Addiction should be understood as a chronic recurring illness. Although some addicts do gain full control over their drug use after a single treatment episode, many have relapses. Repeated treatments become necessary to increase the intervals between and diminish the intensity of relapses, until the individual achieves abstinence.

The complexity of this brain disease is not atypical, because virtually no brain diseases are simply biological in nature and expression. All, including stroke, Alzheimer's disease, schizophrenia, and clinical depression, include some behavioral and social aspects. What may make addiction seem unique among brain diseases, however, is that it does begin with a clearly voluntary behavior--the initial decision to use drugs. Moreover, not everyone who ever uses drugs goes on to become addicted. Individuals differ substantially in how easily and quickly they become addicted and in their preferences for particular substances. Consistent with the biobehavioral nature of addiction, these individual differences result from a combination of environmental and biological, particularly genetic, factors. In fact, estimates are that between 50 and 70 percent of the variability in susceptibility to becoming addicted can be accounted for by genetic factors.

Although genetic characteristics may predispose individuals to be more or less susceptible to becoming addicted, genes do not doom one to become an addict.

Over time the addict loses substantial control over his or her initially voluntary behavior, and it becomes compulsive. For many people these behaviors are truly uncontrollable, just like the behavioral expression of any other brain disease. Schizophrenics cannot control their hallucinations and delusions. Parkinson's patients cannot control their trembling. Clinically depressed patients cannot voluntarily control their moods. Thus, once one is addicted, the characteristics of the illness--and the treatment approaches--are not that different from most other brain diseases. No matter how one develops an illness, once one has it, one is in the diseased state and needs treatment.

Moreover, voluntary behavior patterns are, of course, involved in the etiology and progression of many other illnesses, albeit not all brain diseases. Examples abound, including hypertension, arteriosclerosis and other cardiovascular diseases, diabetes, and forms of cancer in which the onset is heavily influenced by the individual's eating, exercise, smoking, and other behaviors.

Addictive behaviors do have special characteristics related to the social contexts in which they originate. All of the environmental cues surrounding initial drug use and development of the addiction actually become "conditioned" to that drug use and are thus critical to the development and expression of addiction. Environmental cues are paired in time with an individual's initial drug use experiences and, through classical conditioning, take on conditioned stimulus properties. When those cues are present at a later time, they elicit anticipation of a drug experience and thus generate tremendous drug craving. Cue-induced craving is one of the most frequent causes of drug use relapses, even after long periods of abstinence, independently of whether drugs are available.

The salience of environmental or contextual cues helps explain why reentry to one's community can be so difficult for addicts leaving the controlled environments of treatment or correctional settings and why aftercare is so essential to successful recovery. The person who became addicted in the home environment is constantly exposed to the cues conditioned to his or her initial drug use, such as the neighborhood where he or she hung out, drug-using buddies, or the lamppost where he or she bought drugs. Simple exposure to those cues automatically triggers craving and can lead rapidly to relapses. This is one reason why someone who apparently

overcame drug cravings while in prison or residential treatment could quickly revert to drug use upon returning home. In fact, one of the major goals of drug addiction treatment is to teach addicts how to deal with the cravings caused by inevitable exposure to these conditioned cues.

Implications

Understanding addiction as a brain disease has broad and significant implications for the public perception of addicts and their families, for addiction treatment practice, and for some aspects of public policy. On the other hand, this biomedical view of addiction does not speak directly to and is unlikely to bear significantly on many other issues, including specific strategies for controlling the supply of drugs and whether initial drug use should be legal or not. Moreover, the brain disease model of addiction does not address the question of whether specific drugs of abuse can also be potential medicines. Examples abound of drugs that can be both highly addicting and extremely effective medicines. The best-known example is the appropriate use of morphine as a treatment for pain. Nevertheless, a number of practical lessons can be drawn from the scientific understanding of addiction.

It is no wonder addicts cannot simply quit on their own. They have an illness that requires biomedical treatment. People often assume that because addiction begins with a voluntary behavior and is expressed in the form of excess behavior, people should just be able to quit by force of will alone. However, it is essential to understand when dealing with addicts that we are dealing with individuals whose brains have been altered by drug use. They need drug addiction treatment. We know that, contrary to common belief, very few addicts actually do just stop on their own. Observing that there are very few heroin addicts in their 50 or 60s, people frequently ask what happened to those who were heroin addicts 30 years ago, assuming that they must have quit on their own. However, longitudinal studies find that only a very small fraction actually quit on their own. The rest have either been successfully treated, are currently in maintenance treatment, or (for about half) are dead. Consider the example of smoking cigarettes: Various studies have found that between 3 and 7 percent of people who try to quit on their own each year actually succeed. Science has at last convinced the public that depression is not just a lot of sadness; that depressed individuals are in a different brain state and thus require treatment to get their symptoms under control. The same is true for schizophrenic patients. It is time to recognize that this is also the case for addicts.

The role of personal responsibility is undiminished but clarified. Does having a brain disease mean that people who are addicted no longer have any responsibility for their behavior or that they are simply victims of their own genetics and brain chemistry? Of course not. Addiction begins with the voluntary behavior of drug use, and although genetic characteristics may predispose individuals to be more or less susceptible to becoming addicted, genes do not doom one to become an addict. This is one major reason why efforts to prevent drug use are so vital to any comprehensive strategy to deal with the nation's drug problems. Initial drug use is a voluntary, and therefore preventable, behavior.

Moreover, as with any illness, behavior becomes a critical part of recovery. At a minimum, one must comply with the treatment regimen, which is harder than it sounds. Treatment compliance is the biggest cause of relapses for all chronic illnesses, including asthma, diabetes, hypertension, and addiction. Moreover, treatment compliance rates are no worse for addiction than for these other illnesses, ranging from 30 to 50 percent. Thus, for drug addiction as well as for other chronic diseases, the individual's motivation and behavior are clearly important parts of success in treatment and recovery.

Implications for treatment approaches and treatment expectations. Maintaining this comprehensive biobehavioral understanding of addiction also speaks to what needs to be provided in drug treatment programs. Again, we must be careful not to pit biology against behavior. The National Institute on Drug Abuse's recently published Principles of Effective Drug Addiction Treatment provides a detailed discussion of how we must treat all aspects of the individual, not just the biological component or the behavioral component. As with other brain diseases such as schizophrenia and depression, the data show that the best drug addiction treatment approaches attend to the entire individual, combining the use of medications, behavioral therapies, and attention to necessary social services and rehabilitation. These might include such services as family therapy to enable the patient to return to successful family life, mental health services, education and vocational training, and housing services.

That does not mean, of course, that all individuals need all components of treatment and all rehabilitation services. Another principle of effective addiction treatment is that the array of services included in an individual's treatment plan must be matched to his or her particular set of needs. Moreover, since those needs will surely change over the course of recovery, the array of services provided will need to be continually reassessed and adjusted.

Entry into drug treatment need not be completely voluntary in order for it to work.

What to do with addicted criminal offenders. One obvious conclusion is that we need to stop simplistically viewing criminal justice and health approaches as incompatible opposites. The practical reality is that crime and drug addiction often occur in tandem: Between 50 and 70 percent of arrestees are addicted to illegal drugs. Few citizens would be willing to relinquish criminal justice system control over individuals, whether they are addicted or not, who have committed crimes against others. Moreover, extensive real-life experience shows that if we simply incarcerate addicted offenders without treating them, their return to both drug use and criminality is virtually guaranteed.

A growing body of scientific evidence points to a much more rational and effective blended public health/public safety approach to dealing with the addicted offender. Simply summarized, the data show that if addicted offenders are provided with well-structured drug treatment while under criminal justice control, their recidivism rates can be reduced by 50 to 60 percent for subsequent drug use and by more than 40 percent for further criminal behavior. Moreover, entry into drug treatment need not be completely voluntary in order for it to work. In fact, studies suggest that increased pressure to stay in treatment--whether from the legal system or from family members or employers--actually increases the amount of time patients remain in treatment and improves their treatment outcomes.

Findings such as these are the underpinning of a very important trend in drug control strategies now being implemented in the United States and many foreign countries. For example, some 40 percent of prisons and jails in this country now claim to provide some form of drug treatment to their addicted inmates, although we do not know the quality of the treatment provided. Diversion to drug treatment programs as an alternative to incarceration is gaining popularity across the United States. The widely applauded growth in drug treatment courts over the past five years--to more than 400--is another successful example of the blending of public health and public safety approaches. These drug courts use a combination of criminal justice sanctions and drug use monitoring and treatment tools to manage addicted offenders.

Updating the discussion

Understanding drug abuse and addiction in all their complexity demands that we rise above simplistic polarized thinking about drug issues. Addiction is both a public health and a public safety issue, not one or the other. We must deal with both the supply and the demand issues with equal vigor. Drug abuse and addiction are about both biology and behavior. One can have a disease and not be a hapless victim of it.

We also need to abandon our attraction to simplistic metaphors that only distract us from developing appropriate strategies. I, for one, will be in some ways sorry to see the War on Drugs metaphor go away, but go away it must. At some level, the notion of waging war is as appropriate for the illness of addiction as it is for our War on Cancer, which simply means bringing all forces to bear on the problem in a focused and energized way. But, sadly, this concept has been badly distorted and misused over time, and the War on Drugs never became what it should have been: the War on Drug Abuse and Addiction. Moreover, worrying about whether we are winning or losing this war has deteriorated to using simplistic and inappropriate measures such as counting drug addicts. In the end, it has only fueled discord. The War on Drugs metaphor has done nothing to advance the real conceptual challenges that need to be worked through.

I hope, though, that we will all resist the temptation to replace it with another catchy phrase that inevitably will devolve into a search for quick or easy-seeming solutions to our drug problems. We do not rely on simple metaphors or strategies to deal with our other major national problems such as education, health care, or national security. We are, after all, trying to solve truly monumental, multidimensional problems on a national or even international scale. To devalue them to the level of slogans does our public an injustice and dooms us to failure.

Understanding the health aspects of addiction is in no way incompatible with the need to control the supply of drugs. In fact, a public health approach to stemming an epidemic or spread of a disease always focuses comprehensively on the agent, the vector, and the host. In the case of drugs of abuse, the agent is the drug, the host is the abuser or addict, and the vector for transmitting the illness is clearly the drug suppliers and dealers that keep the agent flowing so readily. Prevention and treatment are the strategies to help protect the host. But just as we must deal with the flies and mosquitoes that spread infectious diseases, we must directly address all the vectors in the drug-supply system.

In order to be truly effective, the blended public health/public safety approaches advocated here must be implemented at all levels of society--local, state, and national. All drug problems are ultimately local in character and impact, since they differ so much across geographic settings and cultural contexts, and the most effective solutions are implemented at the local level. Each community must work through its own locally appropriate antidrug implementation strategies, and those strategies must be just as comprehensive and science-based as those instituted at the state or national level.

The message from the now very broad and deep array of scientific evidence is absolutely clear. If we as a society ever hope to make any real progress in dealing with our drug problems, we are going to have to rise above moral outrage that addicts have "done it to themselves" and develop strategies that are as sophisticated and as complex as the problem itself. Whether addicts are "victims" or not, once addicted they must be seen as "brain disease patients."

Moreover, although our national traditions do argue for compassion for those who are sick, no matter how they contracted their illnesses, I recognize that many addicts have disrupted not only their own lives but those of their families and their broader communities, and thus do not easily generate compassion. However, no matter how one may feel about addicts and their behavioral histories, an extensive body of scientific evidence shows that approaching addiction as a treatable illness is extremely cost-effective, both financially and in terms of broader societal impacts such as family violence, crime, and other forms of social upheaval. Thus, it is clearly in everyone's interest to get past the hurt and indignation and slow the drain of drugs on society by enhancing drug use prevention efforts and providing treatment to all who need it.

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Appendix B
ADAM data for Denver Quarter 1 2009

ADAM II Q1 2009 Report

Denver County, CO

Primary City: Denver

Male Arrestees

All Statistics Weighted

Facilities in Sample: 1
Sampled Eligible Arrestees: 373
Arrestees Booked in Data Collection Period: 1388

Conditional Interview Response Rate[1]: 86% (n = 267)
Urine Response Rate to Interviews: 88% (n = 236)

Age of Booked Arrestees (%)							Race of Booked Arrestees (%)					
Mean Age	<21	21-25	26-30	31-35	36+	Unknown	White[2]	Black or African American	Hispanic/ Latino	American Indian/ Alaska Native	Native Hawaiian/ Pacific Islander	Asian
33.8	13.2	19.9	14.2	9.7	42.9	0.0	47.1	30.3	47.0	12.6	1.5	0.8

Percent Positive for Drugs

	Total Testing Positive (%)		Testing Positive by Drug and Age (%)						Testing Positive by Drugs and Race (%)				
		Std Error	<21	21-25	26-30	31-35	36+	Unknown	White	Black	Hispanic	Other	Unknown
Any Drug[3,4]	71.2	3.2	83.1	70.1	55.9	77.2	72.1	-	67.2	77.6	64.7	69.5	-
Cocaine	27.2	3.2	5.3	10.2	27.3	32.9	41.5	-	19.5	33.4	26.8	36.3	-
Marijuana	47.0	3.6	83.1	57.3	42.4	47.9	30.8	-	42.7	50.4	43.9	45.3	-
Opiates	7.7	1.8	5.5	5.8	6.0	8.6	10.4	-	11.5	8.4	5.8	0.0	-
Oxycodone	1.2	-	3.0	0.0	0.0	0.0	1.8	-	1.8	1.1	0.9	0.0	-
Meth	5.8	1.6	0.0	8.5	9.6	7.0	5.8	-	10.6	1.4	5.5	4.3	-
Multiple Drug[3,4]	20.8	2.8	11.3	15.6	20.1	22.5	25.6	-	19.9	20.1	19.0	20.8	-

Percent Positive for Drugs by Offense Category

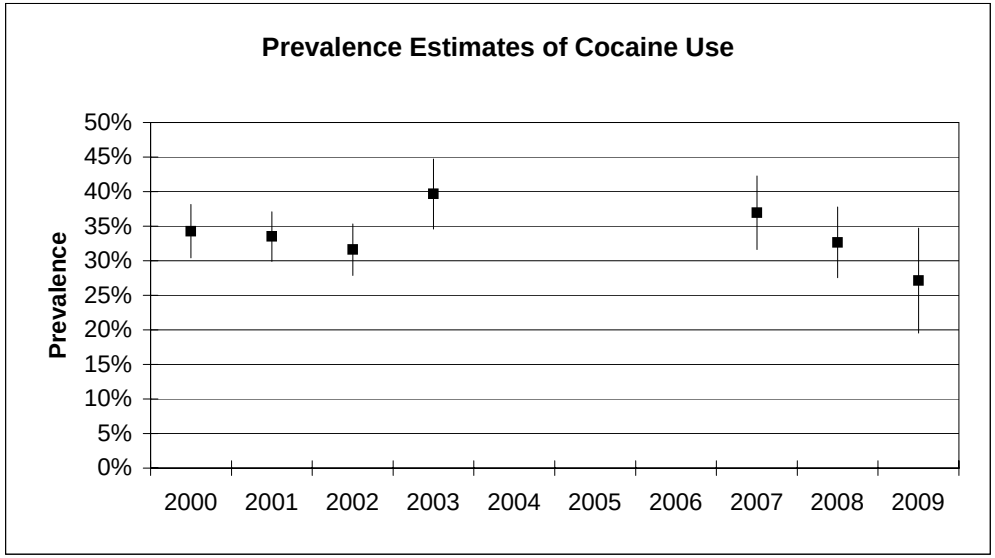
	Violent (%)	Property (%)	Drug Possession (%)	Drug Distribution (%)	Other (%)	Unknown (%)
	(n = 53)	(n = 48)	(n = 44)	(n = 0)	(n = 126)	(n = 2)
Any Drug[3,4]	71.6	67.1	88.1	-	66.6	100.0
Cocaine	21.9	23.6	44.8	-	24.9	0.0
Marijuana	43.5	45.2	51.5	-	45.1	100.0
Opiates	5.8	7.6	15.8	-	5.0	0.0
Oxycodone	0.0	1.8	4.4	-	0.0	0.0
Meth	2.4	8.0	10.6	-	4.8	0.0
Multiple Drug[3,4]	7.6	23.9	38.8	-	17.6	0.0

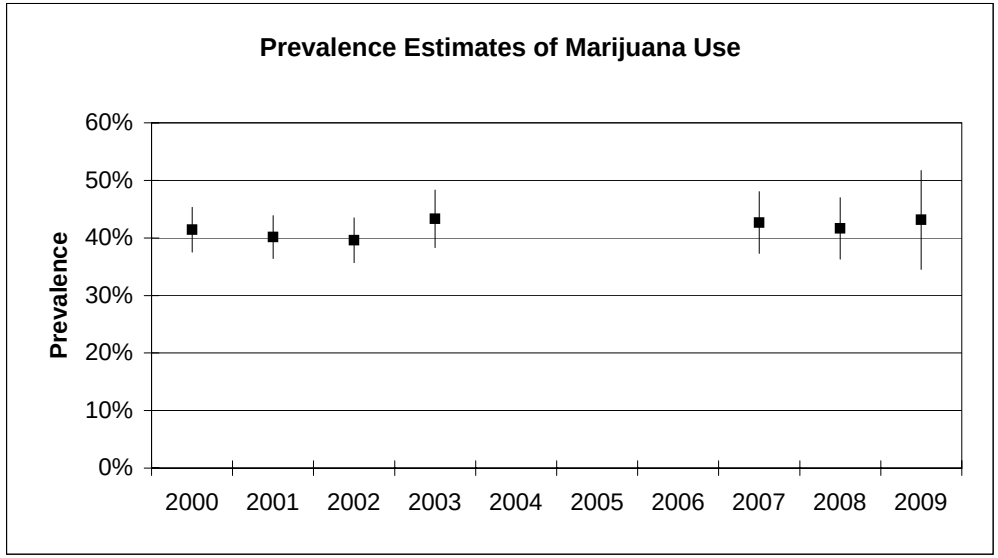
Self-Reported Drug Use in the Past Year and Experience with Drug and Mental Health Treatment

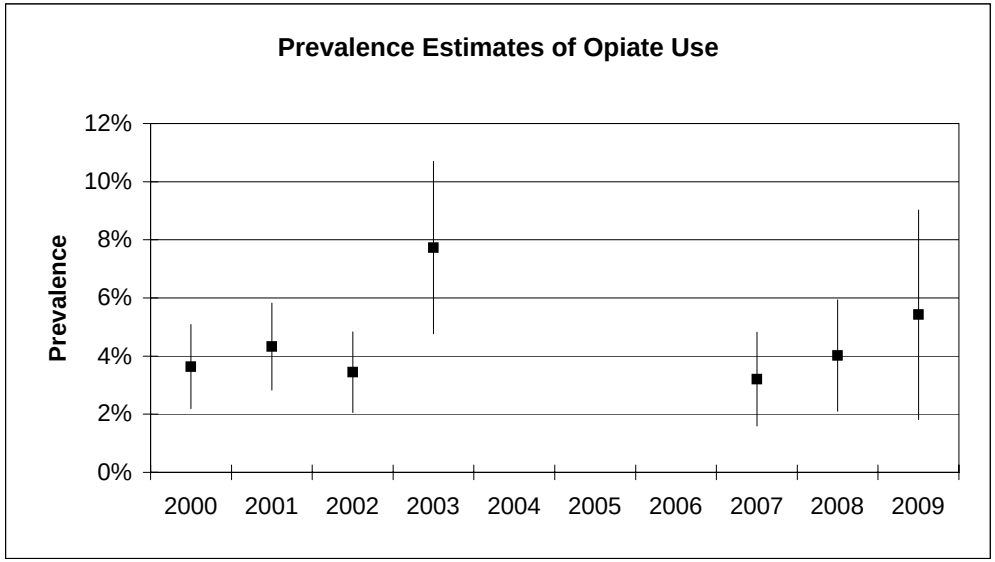
	Any Treatment Ever (%)	Treatment Time by Type of Treatment (%)								
		Inpatient			Outpatient			Mental Health Treatment		
		Ever	% Last Year[5]	Avg Nights Last Year	Ever	% Last Year[5]	Avg Adm Last Year	Ever	% Last Year[5]	Avg Nights Last Year
Crack Cocaine	70.3	60.0	25.6	24.0	30.5	17.0	0.3	20.8	6.4	0.1
Powder Cocaine	50.0	39.9	10.4	3.8	26.7	15.9	0.3	14.8	5.0	0.1
Marijuana	48.5	38.3	11.6	6.2	20.4	7.1	0.1	12.4	3.4	2.7
Heroin	56.7	53.7	23.9	11.5	19.8	19.8	0.5	35.0	15.9	0.6
Meth	44.6	23.7	4.1	1.4	32.3	14.4	0.3	19.1	12.3	0.2

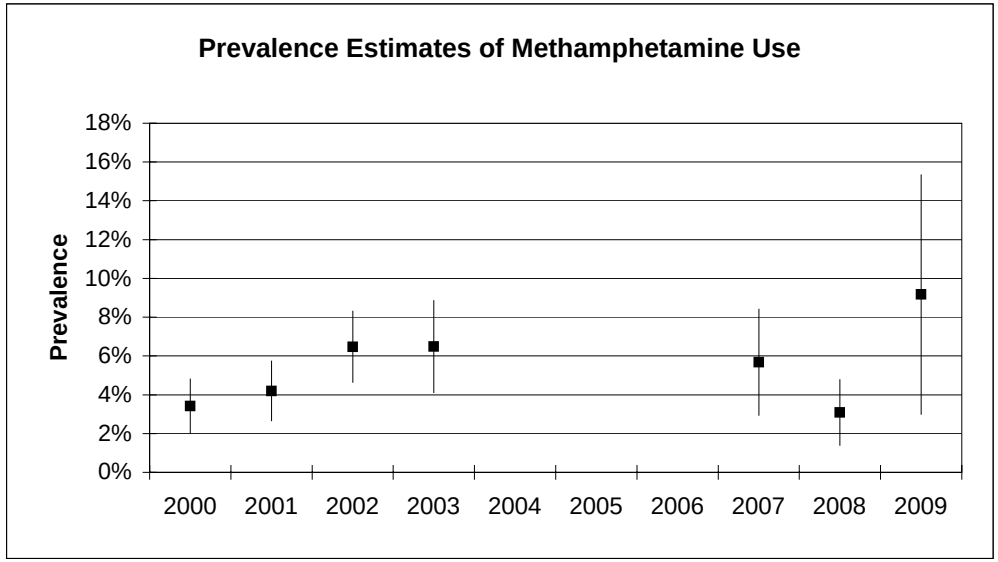
1 - Conditional interview response rate is the number of completed interviews divided by the number of sampled arrestees available to be interviewed
2- Categories are not mutually exclusive; arrestees may report multiple race categories.
3 - Drug panel includes marijuana, cocaine, opiates, amphetamine EMIT test, PCP, valium, darvon, methadone, barbiturates, and oxycodone
4 - Denominator includes anyone that provided a large enough urine sample to test for all of the drug panel
5 - Percentage of arrestees responding to the calendar section of the ADAM survey

Trend Estimates of Testing Positive for Drugs









Note: For each year, the dot is the prevalence estimate and the line indicates a 95% confidence interval

Description of the Sample

Education of Booked Arrestees (%)	
None	30.2
High school or GED	40.7
Vocational or trade school	4.2
Some college or two-year associate	20.2
Four year degree or higher	4.6

Current Housing for Booked Arrestees (%)	
Own house, mobile home, apartment	43.2
Someone else's house, mobile home, apartment	35.6
Group quarters[1]	3.6
Hospital or care facility	1.4
Incarceration Facility	1.1
Shelter/ No Fixed Residence	14.7
Other	0.4

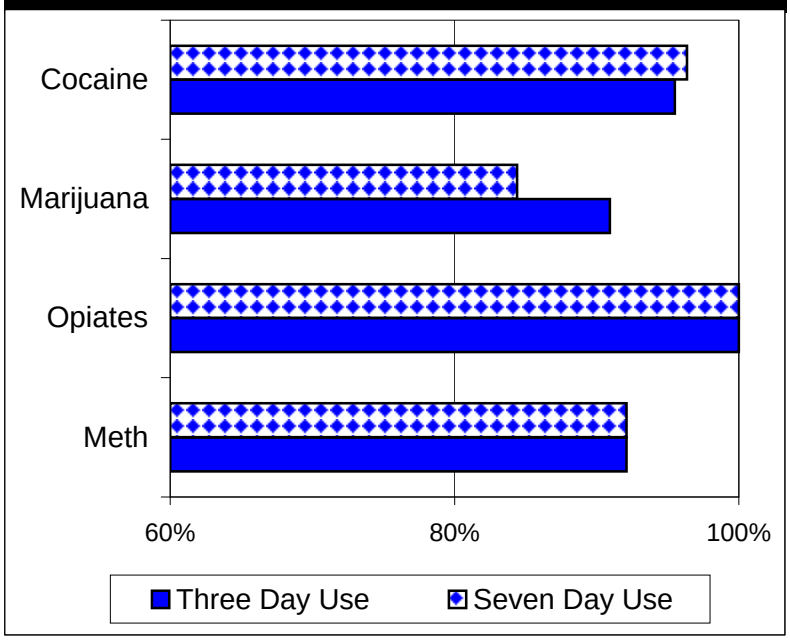
Current Employment Status for Booked Arrestees (%)	
Working full time/ active military status	30.7
Working part-time/ seasonal	13.7
Unemployed (looking for work)	35.2
Unemployed (not looking for work)	6.7
In school only	3.0
Retired	1.4
Disabled for work or on leave	8.1
Other	1.1

Current Health Insurance for Booked Arrestees (%)	
No Insurance	70.2
Individually Purchased	5.1
Employer or Union Funded	10.7
State Government Funded	8.3
Retirement Medicare	0.4
Disability Medicare	3.9
Veterans Affairs	1.5
Multiple Types	0.0

Self Reported Use of Five Primary Drugs - Past 12 Month Use (%)	
Crack Cocaine	18.7
Powder Cocaine	15.3
Marijuana	51.3
Heroin	5.6
Methamphetamine	7.5

Average Number of Days per Month Used Past Year by Drug among Self-Reported 12-Month Users	
Crack Cocaine	5.1
Powder Cocaine	2.7
Marijuana	10.2
Heroin	12.1
Methamphetamine	5.1

Percent Testing Positive for those who Self-Reported 3-Day and 7-Day Use



Injection at most recent use (%)	
Crack Cocaine	0.0
Powder Cocaine	16.4
Heroin	68.5
Methamphetamine	27.3
Other	0.0

Past 30 Day Self-Reported Drug Use (%)	
Crack Cocaine	15.1
Powder Cocaine	7.9
Marijuana	47.4
Heroin	5.0
Methamphetamine	5.0

Self-Reported Arrests in Past Year (%)	
None	56.6
1-2	37.6
3-5	5.7
6 or more	0.0

1 - Group quarters include residential hotel, rooming house, dormitory, group home, student housing, or military base

Dynamics of Drug Markets in Past 30 Days

Place where Last Purchase Occurred (%)

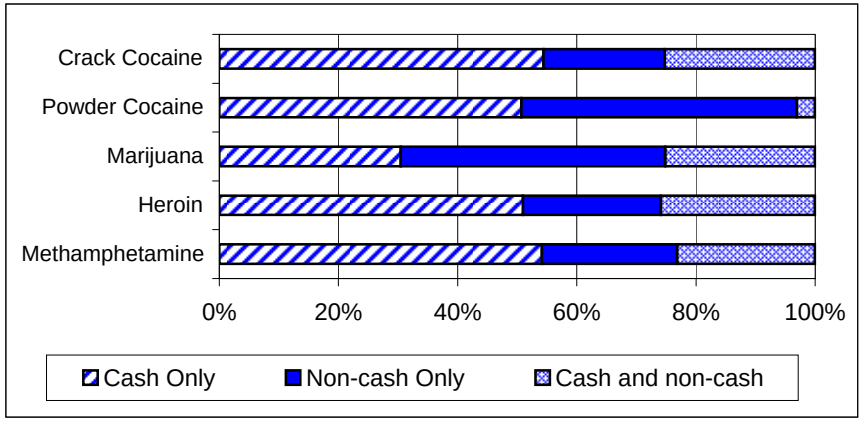
	n	Public Building	House Apartment	Outdoor Area	Other Area
Crack Cocaine	25	3.0	29.9	67.1	0.0
Powder Cocaine	13	28.9	27.2	43.9	0.0
Marijuana	68	8.1	36.0	52.8	3.1
Heroin	9	0.0	36.5	63.5	0.0
Methamphetamine	10	22.6	60.7	8.5	8.2

Method of Non-Cash Transaction (%)

	n	Trade Drugs	Trade Property	Trade Sex	Other[1]
Crack Cocaine	17	0.0	0.0	0.0	100.0
Powder Cocaine	12	0.0	0.0	0.0	100.0
Marijuana	94	0.0	0.0	0.0	100.0
Heroin	7	0.0	0.0	0.0	100.0
Methamphetamine	7	0.0	22.3	0.0	77.7

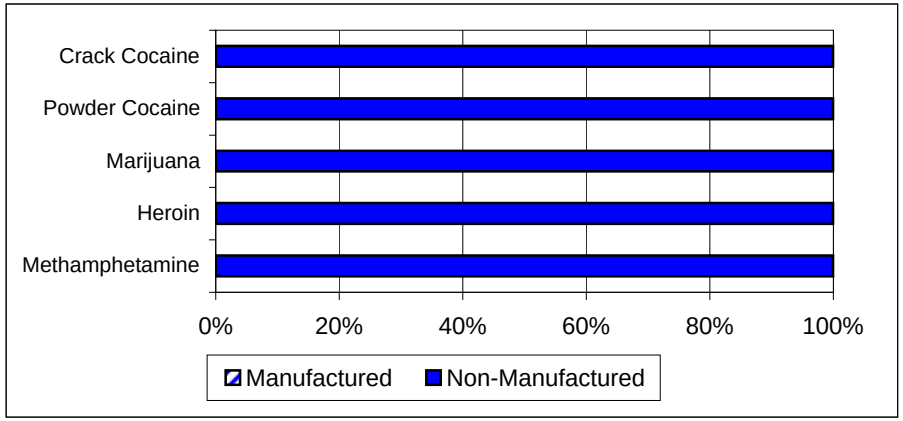
[1] - Credit, fronted, manufactured, transport/steal drugs, gift, other

Drugs obtained by Cash, Non-cash, and Combination Transactions[2]



[2] - Respondents report most recent cash and non-cash transactions

Acquiring Drugs by Non-Cash (Manufacture or Other)



Appendix C
Alcohol and Drug Abuse Division (ADAD) substance abuse disorder treatment rules

ALCOHOL AND DRUG ABUSE DIVISION (ADAD)

SUBSTANCE USE DISORDER TREATMENT RULES

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Appendix D
Evidence based correctional practices

Evidence Based Correctional Practices

"What works in corrections" is not a program or a single intervention but rather a body of knowledge that is accessible to criminal justice professionals.[1]

The National Institute of Corrections (NIC) has been promoting the use of evidence-based practice for many years. The eight principles of evidence based corrections are summarized on the NIC website.[2] These principles, along with additional discussion, are presented below. Corrections and criminology research conducted over the past several decades provide substantial direction for implementing prison and community-based programs for criminal offenders. Criminologists have spanned the research-practice divide that has emerged over the last fifteen years. Now leaders in corrections must take forward the information learned and implement programs based on the principles of effective intervention.

Prepared by Colorado Division of Criminal Justice, Office of Research and Statistics. Based in part on material available from the National Institute of Corrections (www.nicic.org), August 2007.

[1] Latessa, E. J. and Lowenkamp, C. (2006). What works in reducing recidivism? *University of St. Thomas Law Journal* 521-535.

[2] Available at http://www.nicic.org, especially http://www.nicic.org/pubs/2004/019342.pdf.

Recidivism reduction: Implementing new programs and expanding existing programs for the purpose of recidivism reduction requires integrating the principles described here.

ONE:
Assess offender risk/need levels using actuarial instruments

Risk factors are both static (never changing) and dynamic (changing over time, or have the potential to change). Focus is on criminogenic needs, that is, offender deficits that put him or her at-risk for continued criminal behavior.[3] For example, many studies show that specific offender deficits are associated with criminal activity, such as lack of employment, lack of education, lack of housing stability, substance abuse addiction. Actuarial instrument tools are available which can assist in the identification of these areas of service needs. One of the most common of these is the Level of Service Inventory (LSI).[4] The LSI (see sidebar) may be the most used instrument: In a 1999 study, researchers found that 14% of the agencies surveyed in a national study were using the LSI-Revised with another 6% planning on implementing it in the near future.[5] It is used in jurisdictions across the U.S. and Canada, and has been the subject of a considerable amount of research. Systematically identifying and intervening in the areas of criminogenic need is effective at reducing recidivism.

[3] Criminogenic risk refers to attributes associated with criminal behaviors and recidivism include (Gendreau, and Andrews, 1990): (1) Anti-social attitudes, values, and beliefs (criminal thinking); (2) Pro-criminal associates and isolation from pro-social associates, (3) Particular temperament and behavioral characteristics (e.g., egocentrism); (4) Weak problem-solving and social skills; (5) Criminal history; (6) Negative family factors (i.e., abuse, unstructured or undisciplined environment), criminality in the family, substance abuse in the family); (7) Low levels of vocational and educational skills (8) Substance abuse. The more risk factors present, the greater the risk for committing criminal acts.

[4] Andrews, D.A. and Bonta, J. L. (2003). *Level of Supervision Inventory-Revised. U.S. Norms Manual Supplement*. Toronto: Multi Health Systems. The LSI assesses the extent of need in the following areas: criminal history, education, employment, financial, family and marital relationships, residential accommodations, leisure and recreation activities, companions, alcohol and drug problems, emotional and personal, and pro-social attitudes and orientations.

[5] Jones, D. A., Johnson, S., Latessa, E. J., and Travis, L. F. (1999). *Case classification in community corrections: Preliminary findings from a national survey*. Topics in Community Corrections. Washington D.C.: National Institute of Corrections, U.S. Department of Justice.

TWO:
Enhance offender motivation

Humans respond better when motivated- rather than persuaded-to change their behavior. An essential principle of effective correctional intervention is the treatment team playing an important role in recognizing the need for motivation and using proven motivational techniques. Motivational interviewing, for example, is a specific approach to interacting with offenders in ways that tend to enhance and maintain interest in changing their behaviors.

But when it comes to using this information in the systematic application of program services, most corrections agencies fall short.

THREE:
Target interventions

This requires the application of what was learned in the assessment process described in #1 above.[6] Research shows that targeting three or fewer criminogenic needs does *not* reduce recidivism. Targeting four to six needs (at a minimum), has been found to reduce recidivism by 31 percent. Correctional organizations have a long history of assessing inmates for institutional management purposes, if nothing else. But when it comes to using this information in the systematic application of program services, most corrections agencies fall short. While inmate files may contain adequate information identifying offender's deficits and needs, correctional staff are often distracted by population movement, lockdowns, and day-to-day prison operations. Often, these take priority over the delivery of services based on the offender's criminogenic needs. Staff training and professionalism becomes an essential component of developing a culture of personal change: well-trained staff can—and must—role model and promote pro-social attitudes and behaviors even while maintaining a safe and secure environment.

Thus, targeting interventions requires clear leadership and management of the prison culture. Implementation methods include the following:

- **Act on the risk principle**. This means prioritizing supervision and treatment resources for higher risk offenders.

[6] Gendreau, French and Taylor (2002). What Works (What Doesn't Work) Revised 2002.

WHAT IS THE LSI-r?

The Level of Service Inventory-Revised (LSI-r)[1] is one of the most commonly used classification tools used with adult offenders. The LSI-r is used in a variety of correctional contexts across the United States to guide decision making. In Colorado, the LSI-r is used in probation, community corrections, prison and parole to develop supervision and case management plans, and to determine placement in correctional programs. In some states, the LSI-r is used to make institutional assignments and release from institutional custody decisions. It may be the most used instrument: In a 1999 study, researchers found that 14% of the agencies surveyed in a national study were using the LSI-R with another 6% planning on implementing it in the near future.[2] The instrument is perhaps the most researched correctional risk/needs assessment and, from the first validation study in 1982, it has continued to show consistent predictive validity for a range of correctional outcomes.[3]

The LSI-R assessment is administered via a structured interview. Supporting documentation should be collected from family members, employers, case files, drug tests, and other relevant sources.[4] (Andrews & Bonta, 1995).

The instrument includes 54 items that measure ten components of risk and need. The components measured are:

- *Criminal history,*
- *Education,*
- *Employment,*
- *Financial,*
- *Family and marital relationships,*
- *Residential accommodations,*
- *Leisure and recreation activities,*
- *Companions,*
- *Alcohol and drug problems,*
- *Emotional and personal, and*
- *Pro-social attitudes and orientations.*

The LSI-r predicts recidivism but perhaps more importantly it also provides information pertaining to offender needs. Re-assessment every six months allows for an examination of whether the offender's need level was improved by the intervening programming. Probation and DOC apply differing score paradigms for determining levels of risk and need for their respective individual populations.

Probation and DOC have set different score categories for designation of risk/need.

RISK/NEED category	Probation	DOC
Low	1-18	0-12
Medium	19-28	13-26
High	29-54	27-54

Level of Supervision Inventory
Percent chance of recidivism within one year (based on total score).

LSI total score (Raw score)	Percent chance of recidivism
0 to 5	9%
6 to 10	20%
11 to 15	25%
16 to 20	30%
21 to 25	40%
26 to 30	43%
31 to 35	50%
36 to 40	53%
41 to 45	58%
46 to 50	69%
50 to 54	<70%

Source: Andrews, D.A. and Bonta, J. L. (2003). *Level of Supervision Inventory-Revised. U.S. Norms Manual Supplement*. Toronto: Multi Health Systems.

[1] Andrews, D.A. and Bonta, J. (1995). *The Level of Service Inventory-Revised*. Toronto: Multi-Health Systems.

[2] Jones, D. A., Johnson, S., Latessa, E. J., and Travis, L. F. (1999). *Case classification in community corrections: Preliminary findings from a national survey*. Topics in Community Corrections. Washington, D.C.: National Institute of Corrections, U.S. Department of Justice.

[3] Andrews, D.A. (1982). *The Level of Supervision Inventory (LSI): The first follow-up*. Toronto: Ontario Ministry of Correctional Services; Andrews, D.A., Dowden, C. and Gendreau, P. (1999). *Clinically relevant and psychologically informed approaches to reduced re-offending: A meta-analytic study of human service, risk, need, responsivity and other concerns in justice contexts.* Ottawa: Carleton University.

[4] Andrews, D.A. and Bonta, J. (1995). *The Level of Supervision Inventory-revised*. Toronto: Multi-Health Systems.

Some studies have shown that lower risk offenders have a high probability of successfully re-integrating into the community without intense prison programming.[7] They tend to have positive support groups and are not without resources. Placing these offenders in correctional programs tends to disrupt their pro-social networks and increase their likelihood of recidivism.

Staff training and professionalism becomes an essential component of developing a culture of personal change: well-trained staff can—and must—role model and promote pro-social attitudes and behaviors even while maintaining a safe and secure environment.

- **Act on the need principle**. The fundamental point of this principle is to provide services according to individual deficits—social skills, thinking errors, vocational training, misuse of leisure time, drug and alcohol abuse—when these are identified by the assessment in #1 above. Sex offenders, for example, have significant deficits that are identified in general assessment tools such as the LSI, but research shows they also have additional treatment needs that require specialized interventions by professionals with specific expertise.

- **Implement the responsivity principle**. Inmates, like other humans, have different temperaments, learning styles, and motivation levels. These must be acknowledged and services must accommodate and consistently promote every individual's ability to participate in a program. Many evidence-based programs, however, have low or no success with offenders of color, and women have very different service and program needs than men. Hence, gender and cultural difference must be accounted for. Recidivism reduction requires developing interventions that are sensitive to the learning styles and psychological needs of all program participants.

- **Ensure adequate program dose and duration**. Many efficacy studies have found that high-risk offenders should spend 40 to 70 percent of their time in highly structured activities and programming for 3 to 9 months prior to release.[8] However, these are minimum durations and are likely to be inadequate for both sex offender populations and serious drug addicts. Studies of both populations have found that duration and intensity are linked to positive outcomes. For both populations, the need for structured and accountable time throughout the day and week is likely higher than the average 40 to 70 percent found in studies of the general criminal population. The continuity of structure, treatment, and accountability must follow both substance addicts and sex offenders into the community, and treatment should be delivered as a life-long plan for changing entrenched negative lifestyle behaviors.[9] The evidence indicates that incomplete or uncoordinated approaches can have negative effects and increase recidivism and victimization.[10]

The continuity of structure, treatment, and accountability must follow both substance addicts and sex offenders into the community, and treatment should be delivered as a life-long plan for changing entrenched negative lifestyle behaviors. The evidence indicates that incomplete or uncoordinated approaches can have negative effects and increase recidivism and victimization.

[7] Andrews, D. A. and Bonta, J. (2003). *The psychology of criminal conduct*. Cincinnati, OH: Anderson Publishing Co.; Clear, T. R. "Objectives-Based Case Planning," National Institute of Corrections, Monograph 1981, Longmont, CO.; Currie, E. (1998). *Crime and punishment in America*. New York: Metropolitan Books; Palmer, T. (1995). "Programmatic and non-programmatic aspects of successful intervention: New directions for research," *Crime & Delinquency*, 41.

[8] Gendreau, P. and Goggin, C. (1995). "Principles of effective correctional programming with offenders," Center for Criminal Justice Studies and Department of Psychology, University of New Brunswick; Palmer, T. (1995). "Programmatic and non-programmatic aspects of successful intervention: New directions for research," *Crime & Delinquency*, 41,100-131; Higgins, H. and Silverman, K. (1999). *Motivating Behavior Change Among Illicit-Drug Abusers: Research on Contingency Management Interventions*. Washington, D.C.: American Psychological Association.

[9] National Institute on Drug Abuse's *Principles of Drug Abuse Treatment for Criminal Justice Populations: A Research Based Guide*, available at http://www.nida.nih.gov/PODAT_CJ/ from the U.S. National Institutes of Health.

[10] Higgins, H. and Silverman, K. (1999). Motivating Behavior Change Among Illicit-Drug Abusers: Research on Contingency Management Interventions. American Psychological Association.

- **Implement the treatment principle**. The treatment principle states that cognitive/behavioral treatment should be incorporated into all sentences and sanctions.[11] Treatment is action. First, it is centered on the *present* circumstances and risk factors that are responsible for the offender's behavior. Second, it is *action* oriented rather than talk oriented. Offenders do something about their difficulties rather than just talk about them. Third, clinicians *teach* offenders new, pro-social skills to replace the anti-social ones like stealing, cheating and lying, through modeling, practice, and reinforcement. These behavioral programs would include:
  - o Structured social learning programs where new skills are taught, and behaviors and attitudes are consistently reinforced,
  - o Cognitive behavioral programs that target attitudes, values, peers, substance abuse, anger, etc., and
  - o Family based interventions that train families on appropriate behavioral techniques.

  Interventions based on these approaches are very structured and emphasize the importance of modeling and behavioral rehearsal techniques that engender self-efficacy, challenge cognitive distortions, and assist offenders in developing good problem-solving and self-control skills. These strategies have been demonstrated to be effective in reducing recidivism.[12]

FOUR:
Provide skill training for staff and monitor their delivery of services

Evidence-based programming emphasizes cognitive-behavior strategies and is delivered by well-trained staff. Staff must coach offenders to learn new behavioral responses and thinking patterns. In addition, offenders must engage in role playing and staff must continually and consistently reinforce positive behavior change.

Researchers have found that optimal behavior change results when the ratio of reinforcements is four positive to every negative reinforcement.

FIVE:
Increase positive reinforcement

Researchers have found that optimal behavior change results when the ratio of reinforcements is four positive to every negative reinforcement.[13] While this principle should not interfere with the need for administrative responses to disciplinary violations, the principle is best applied with clear expectations and descriptions of behavior compliance. Furthermore, consequences for failing to meet expectations should be known to the offender as part of the programming activity. Clear rules and consistent consequences that allow offenders to make rewarding choices can be integrated into the overall treatment approach.[14]

Quality control and program fidelity play a central and ongoing role to maximize service delivery. In a study at the Ohio Department of Corrections, programs that scored highest on program integrity measures reduced recidivism by 22 percent. Programs with low integrity actually increased recidivism.

[11] Latessa, E.J. (no date). From theory to practice: What works in reducing recidivism? University of Cincinnati. Paper prepared for the Virginia Division of Criminal Justice Services. Available at http://www.dcjs.virginia.gov/corrections/documents/theoryToPractice.pdf.

[12] Exerpted from page 2, Latessa, E.J. (no date). From theory to practice: What works in reducing recidivism? University of Cincinnati. Paper prepared for the Virginia Division of Criminal Justice Services. Available at http://www.dcjs.virginia.gov/corrections/documents/theoryToPractice.pdf.

[13] Gendreau, P. and Goggin, C. (1995). *Principles of effective correctional programming with offender*. Unpublished manuscript, Center for Criminal Justice Studies and Department of Psychology, University of New Brunswick, New Brunswick.

[14] McGuire, J. (2001). "What works in correctional intervention? Evidence and practical implications," *Offender rehabilitation in practice: Implementing and evaluating effective program*; Higgins, S. T and Silverman, K. (1999). *Motivating Behavior Change Among Illicit-Drug Abusers: Research on Contingency Management Interventions*. Washington, D.C.: American Psychological Association.

SIX:
Engage ongoing support in natural communities

For many years research has confirmed the common sense realization that placing offenders in poor environments and with anti-social peers increases recidivism. The prison-based drug and alcohol treatment communities show that the inmate code can be broken and replaced with a positive alternative and, in the process, teach offenders the skills they will need upon release. Likewise, parole supervision requires attending to the pro-social supports required by inmates to keep them both sober and crime free. Building communities in prison and outside of prison for offenders who struggle to maintain personal change is a key responsibility of correctional administrators today. The National Institute of Corrections calls for:

> *Realign and actively engage pro-social support for offenders in their communities for positive reinforcement of desired new behaviors.*[15]

SEVEN:
Measure relevant processes/practices

An accurate and detailed documentation of case information and staff performance, along with a formal and valid mechanism for measuring outcomes, is the foundation of evidence-based practice. Quality control and program fidelity play a central and ongoing role to maximize service delivery. In a study at the Ohio Department of Corrections, programs that scored highest on program integrity measures reduced recidivism by 22 percent. Programs with low integrity actually increased recidivism.[16]

EIGHT:
Provide measurement feedback

Providing feedback builds accountability and maintains integrity, ultimately improving outcomes. Offenders need feedback on their behavioral changes, and program staff need feedback on program integrity. It is important to reward positive behavior—of inmates succeeding in programs, and of staff delivering effective programming. Measurements that identify effective practices need then to be linked to resources, and resource decisions should be based on objective measurement.

Years of research have gone into the development of these evidence-based principles. When applied appropriately, these practices have the best potential to reduce recidivism. These principles should guide criminal justice program development, implementation and evaluation. For further information, please see the material made available by the National Institute of Corrections, at www.nicic.org.

[15] National Institute of Corrections, http://nicic.org/ThePrinciplesofEffective Interventions.

[16] Latessa, E. J. and Lowenkamp, C. (2006). What works in reducing recidivism? *University of St. Thomas Law Journal*.

Appendix E
County Court Juvenile and District Court
Criminal/Juvenile statutory fees, costs, and surcharges

Category	Amount(s)	CRS Reference	Authority for Waiver/Non-Waiver
Adolescent Substance Abuse Surcharge, aka Minor in Possession of Alcohol (MIPA)	25.00	18-13-122(2)(b)(IV)	NO Statutory Provision for Waiver (CJD 85-31 applies)
Alcohol/Drug Eval. Costs (ALCV)	200.00	42-4-1301.3(4)(a)	NO Statutory Provision for Waiver (CJD 85-31 applies)
Brain Injury Surcharge (BRAI)	15.00 or 20.00 based on offense. (formerly 10.00 or 15.00 for offenses prior to 8/5/09)	42-4-1301(7)(d)(III); 42-4-1701(4)(e)(I)-(III); 42-4-109(13)(b); 42-4-1502(4.5); 30-15-402(3)	NO Statutory Provision for Waiver (CJD 85-31 applies)
Child Abuse Investigation Surcharge (CHLD)	Varies based on offense. 75.00 – 1,500.00 (None in Juv. Del. cases)	18-24-102	Court may waive all or any portion if court finds defendant indigent or financially unable to pay all or any portion. Court may only waive that portion that the court finds the person is unable to pay. 18-24-103(3)
Court Cost (docket fee) – Infraction (CRTC) + (CSCF)	19.00 CRTC + 5.00 CSCF	42-4-1710(4)	NO Statutory Provision for Waiver (CJD 85-31 applies) Court Cost assessments also require 5.00 Court Security Cash Fund assessment
Court Cost (docket fee) – Traffic, Misd. (CRTC) + (CSCF)	21.00 CRTC + 5.00 CSCF	13-32-105	NO Statutory Provision for Waiver (CJD 85-31 applies) Court Cost assessments also require 5.00 Court Security Cash Fund assessment
Drug Offender Surcharge (DRUG)	Varies based on offense. 100.00 – 4,500.00	18-19-103	Court may not waive any portion unless court first finds that offender is financially unable to pay any portion of surcharge. Requires hearing at which offender shall have "burden of presenting clear and convincing evidence that he is financially unable to pay any portion" of surcharge. 18-19-103(6)
Family Friendly Courts Surcharge (FAMF)	1.00	42-4-1701(4)(a)(VI)	NO Statutory Provision for Waiver (CJD 85-31 applies)
Genetic Testing Surcharge (GTSC)	2.50 Assessed on broad range of cases regardless of whether defendant undergoes testing. See statute cited. (None in Juv. Del. cases)	24-33.5-415.6	Court may waive if the court determines the defendant is indigent. 24-33.5-415.6(9)
Late Penalty Fee (LATE)	10.00	16-11-101.6(1) and 16-18.5-105(2)	May be waived or suspended only if court determines that defendant does not have the financial resources to pay fee. 16-11-101.6(1)
Law Enforcement Assistance Fees (LEAF)	90.00	43-4-402(1)	NO Statutory Provision for Waiver (CJD 85-31 applies)
OJW (Outstanding Judgment/Warrant) Fee (OJWF)	30.00	42-2-118(3)(c)	NO Statutory Provision for Waiver (CJD 85-31 applies)
Persistent Drunk Driver Surcharge (PDDS)	50.00 – 500.00 with minimum mandatory if offense was on or after 1/1/07	42-4-1301(7)(d)(II)	Persons convicted are subject to surcharge. (Not imposed on deferred sentences.) Waiver or suspension allowed if the court determines the defendant to be indigent. 42-4-1301(7)(d)(II)
Probation Supervision Fees (SUPV)	50.00/mo. (None in Juv. Del. cases)	18-1.3-204(2)(a)(V)	Court may lower amount to an amount defendant will be able to pay. If private probation, fee paid directly to provider. 18-1.3-204(2)(a)(V)
Public Defender Fee (PDAR)	25.00	21-1-103(3)	Court may waive upon finding that person lacks the financial resources to pay. 21-1-103(3)
Restitution (REST, JSRT)	Varies according to losses.	18-1.3-603	May be decreased only with consent of prosecuting attorney and victim or victims to whom restitution is owed; or if defendant has otherwise compensated victim or victims for the pecuniary losses suffered. 18-1.3-603(3)(b)
Rural Alcohol & Substance Abuse Surcharge (RYAS)	1.00 – 10.00 based on offense. Offenses committed on or after 1/1/10.	42-4-1301(7)(d)(IV); 42-4-1701(4)(f); 18-19-103.5	Court may suspend or waive if the court determines that the defendant is indigent. 42-4-1301(7)(d)(IV)(A); 18-19-103.5(3)
Sex Offender Surcharge (SXOF)	Varies based on offense. 150.00 – 3,000.00 (Juv. Del. assessed 50%)	18-21-103	A portion or all may be waived if the court finds that the defendant is financially unable to pay that portion. Only that portion which the court has found the person unable to pay may be waived. 18-21-103(4)
Special Advocate Surcharge (SPAD)	1,300.00 (None in Juv. Del. cases)	24-4.2-104(1)(a)(II)	May not be suspended or waived by the court unless the court determines that the defendant is indigent. 24-4.2-104(1)(c)
Time Payment Fee (TIME)	25.00	16-11-101.6(1) and 16-18.5-104(2)	May be waived or suspended only if court determines that defendant does not have the financial resources to pay fee. 16-11-101.6(1)
UPS (Useful Public Service) Fee (UPS)	Per UPS agency, up to 120.00	18-1.3-507(6) and 42-4-1301.4(5)	Court may waive fee if court determines defendant to be indigent. 18-1.3-507(6)
Victim Address Confidentiality Surcharge (ADDR)	28.00 (None in Juv. Del. cases)	24-21-214	Court may waive all or portion upon finding of indigence or inability to pay full surcharge. 24-21-214(5)
Victim Comp. Cost (VCMP, or if Title 42 surcharge schedule used, Victim Comp. is tied to VAST assessment below.)	Varies based on offense.	24-4.1-119 and 42-1-217(4)(a)	Statutory provision for waiver applies only when imposed on penalty assessments, upon finding of indigence. 24-4.1-119(1)(f)(II)
Victims Assistance Surcharge (VAST)	37% of fine, applicable minimum, or Title 42 surcharge schedule amount.	24-4.2-104; 42-4-1701 (surcharge schedules); 30-15-402(2)(a)	May not be suspended or waived by the court unless the court determines that the defendant is indigent. 24-4.2-104(1)(c)

*** Fines also to be imposed, as appropriate. Common ones in County Court include:**		
CZOF: Construction Zone Offense	DUI: Driving Under the Influence	SEAT: Seat Belt Fine
CNTT: County Traffic Fine	MISD: Misdemeanor Fine	TOLL: Toll Violation
DOGF: County Pet Animal Control Violation	NINS: Failure to Provide Proof of Insurance	TRAF: Traffic Fine

Category	Amount(s)	CRS Reference	Authority for Waiver/Non-Waiver
Alcohol/Drug Evaluation Costs (ALCV)	200.00	42-4-1301.3(4)(a)	NO Statutory Provision for Waiver (CJD 85-31 applies)
Child Abuse Investigation Surcharge (CHLD)	Varies based on offense. 75.00 – 1,500.00 (None in Juv. Del. cases)	18-24-102	Court may waive all or any portion if court finds defendant indigent or financially unable to pay all or any portion. Court may only waive that portion that the court finds the person is financially unable to pay. 18-24-103(3)
Cost of Care (COCJ, COCO, COCP, COCR, COCV)	Adult probationers: $1,630/yr. less any supervision fees assessed; Juvenile supervision: $1,875/yr.; Institution/Facility costs vary.	18-1.3-701(3),(4)	Based upon defendant's financial ability. 18-1.3-701(3),(4)
Court Cost (docket fee) (CRTC) + (CSCF)	35.00 CRTC + 5.00 CSCF (None in Juv. Del. cases)	13-32-105	NO Statutory Provision for Waiver (CJD 85-31 applies) Court Cost assessments also require 5.00 Court Security Cash Fund assessment
Drug Offender Surcharge (DRUG)	Varies based on offense. 100.00 – 4,500.00 (None in Juv. Del. cases)	18-19-103	Court may not waive any portion unless court first finds that offender is financially unable to pay any portion of surcharge. Requires hearing at which offender shall have "burden of presenting clear and convincing evidence that he is financially unable to pay any portion" of surcharge. Court shall waive "only that portion of the surcharge which the court has found the drug offender is financially unable to pay." 18-19-103(6)
Genetic Testing Surcharge (GTSC)	2.50 Assessed on broad range of cases regardless of whether defendant undergoes testing. See statute cited. (None in Juv. Del. cases)	24-33.5-415.6	Court may waive if the court determines the defendant is indigent. 24-33.5-415.6(9)
Juvenile/Youthful Offender Surcharge (YTHO)	Equivalent to fine imposed.	18-22-103(1)	NO Statutory Provision for Waiver (CJD 85-31 applies)
Late Penalty Fee (LATE)	10.00	16-11-101.6(1) and 16-18.5-105(2)	May be waived or suspended only if court determines that defendant does not have the financial resources to pay fee. 16-11-101.6(1)
Law Enforcement Assistance Fees (LEAF)	90.00	43-4-402(1)	NO Statutory Provision for Waiver (CJD 85-31 applies)
Offender ID fee (OFID)	128.00 Paid by defendants who undergo genetic testing.	16-11-102.4 and 19-2-925.6	NO Statutory Provision for Waiver (CJD 85-31 applies)
Persistent Drunk Driver Surcharge (PDDS)	50.00 – 500.00 with minimum mandatory if offense was on or after 1/1/07	42-4-1301(7)(d)(II)	Persons *convicted* are subject to surcharge. (Not imposed on deferred sentences.) Waiver or suspension allowed if the court determines the defendant to be indigent. 42-4-1301(7)(d)(II)
Probation Supervision Fees (SUPV)	50.00/mo. (None in Juv. Del. cases)	18-1.3-204(2)(a)(V)	Court may lower amount to an amount defendant will be able to pay. If private probation, fee paid directly to provider. 18-1.3-204(2)(a)(V)
Public Defender Fee (PDAR)	25.00	21-1-103(3)	Court may waive upon finding that person lacks the financial resources to pay. 21-1-103(3)
Restitution (REST, JSRT)	Varies according to losses.	18-1.3-603	May be decreased only with consent of prosecuting attorney and victim(s) to whom restitution is owed; or if defendant has otherwise compensated victim(s) for the pecuniary losses suffered. 18-1.3-603(3)(b)
Rural Alcohol & Substance Abuse Surcharge (RYAS)	1.00 – 10.00 based on offense. Offenses committed on or after 1/1/10.	42-4-1301(7)(d)(IV); 42-4-1701(4)(f); 18-19-103.5	Court may suspend or waive if the court determines that the defendant is indigent. 42-4-1301(7)(d)(IV)(A); 18-19-103.5(3)
Sex Offender Surcharge (SXOF)	Varies based on offense. 150.00 – 3,000.00 (Juv. Del. assessed 50%)	18-21-103	A portion or all may be waived if the court finds that the defendant is financially unable to pay that portion. Only that portion which the court has found the person unable to pay may be waived. 18-21-103(4)
Special Advocate Surcharge (SPAD)	1,300.00 (None in Juv. Del. cases)	24-4.2-104(1)(a)(II)	May not be suspended or waived by the court unless the court determines that the defendant is indigent. 24-4.2-104(1)(c)
Stand. Substance Abuse Assessment Cost (DSAS)	Screening only: 45.00 Full assessment: 75.00	18-1.3-209(3)	Person assessed to pay cost unless indigent. 18-1.3-209(3)
Time Payment Fee (TIME)	25.00	16-11-101.6(1) and 16-18.5-104(2)	May be waived or suspended only if court determines that defendant does not have the financial resources to pay fee. 16-11-101.6(1)
UPS (Useful Public Service) Fee (UPS)	Per UPS agency, up to 120.00	18-1.3-507(6) and 42-4-1301.4(5)	Court may waive fee if court determines defendant to be indigent. 18-1.3-507(6)
Victim Address Confidentiality Surcharge (ADDR)	28.00 (None in Juv. Del. cases)	24-21-214	Court may waive all or portion upon finding of indigence or inability to pay full surcharge. 24-21-214(5)
Victim Comp. Cost (VCMP, or if Title 42 surcharge schedule used, Victim Comp. is tied to VAST assessment below.)	Varies based on offense.	24-4.1-119 and 42-1-217(4)(a)	Statutory provision for waiver applies only when imposed on penalty assessments, upon finding of indigence. 24-4.1-119(1)(f)(II)
Victims Assistance Surcharge (VAST)	37% of fine, applicable minimum, or Title 42 surcharge schedule amount.	24-4.2-104; 42-4-1701 (surcharge schedules); 30-15-402(2)(a)	May not be suspended or waived by the court unless the court determines that the defendant is indigent. 24-4.2-104(1)(c)

*** Fines also to be imposed, as appropriate. Common ones in District Court include:**		
FLNF: Felony Fine	JUVF: Juvenile Fine	MISD: Misdemeanor Fine

Appendix F
Division of Behavioral Health
SB 07-097 Offender Mental Services Initiative
background, overview, and programs

STATE OF COLORADO

Colorado Department of Human Services

people who help people

Bill Ritter, Jr.

Governor

OFFICE OF BEHAVIORAL HEALTH AND HOUSING

Joscelyn L. Gay, Executive Deputy Director

DIVISION OF BEHAVIORAL HEALTH

Janet Wood, M.B.A., M.Ed., Director

SB 07-097 OFFENDER MENTAL HEALTH SERVICES INITIATIVE

Background and Overview

SB 07-097 (commonly referred to as Senate Bill 97) was developed in response to Colorado's significant growth in the demand for community-based mental health services for individuals with mental illness involved in local and State criminal justice systems. Through new funds authorized by the Colorado General Assembly (HB 07-1359 (which is a complimentary bill to SB 07-097), the Colorado Department of Human Services, Behavioral Health Services-Division of Mental Health funded the development of 6 mental health service programs by Community Mental Health Centers (CMHC) during FY 2008 for juvenile and adult offenders with mental health problems who are involved in the criminal justice system. Five additional Community Mental Health Centers were added FY 2008.

Specifically, the SB-97 program initiative is intended to develop community-based services for juveniles and adults with mental illness involved in the criminal justice system in collaboration with identified community agencies (i.e., local and State criminal justice agencies) and associated resources. Local projects are expected to set goals concerning the number and types of juvenile with serious emotional disorders (SED) and/or adults with serious mental illness (SMI) to be served. The program requires that CMHC's devote project resources to collecting necessary data to evaluate program effectiveness. Services to be provided are intended to be the least restrictive and to address the following needs:

- Increase community capacity to serve juveniles with SED and adults with SMI
- Provide outcome and recovery oriented services that increase the target population's abilities to function independently in the community.
- Promote communities to work collaboratively across mental health and criminal justice systems
- Reduce jail and prison recidivism
- Provide for long term, local sustainability
- Provide cost effective services

Following are brief program descriptions of Offender Mental Health Services programs for FY 2011. For further information contact the person(s) listed for the specific program.

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Manager, Offender Mental Health Programs
Div. of Behavioral Health
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Denver, CO 80236-3111
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FY 2011 SB-97 Funded Program
(The following program descriptions were provided by the respective Community Mental Health Centers)

Arapahoe/Douglas Mental Health Network

Arapahoe/Douglas Mental Health Network (ADMHN) offers a Re-Entry Program that serves offenders transitioning from the Colorado Department of Corrections to two community corrections programs, or diversion offenders who will be sent to the Colorado Department of Corrections if community corrections sentences are revoked. These services will be provided through two channels:

A. In collaboration with Addiction Research and Treatment Services (ARTS), ADMHN provides services to offenders in the Peer I and Outpatient Therapeutic Community (OTC) programs in ARTS. Services provided by ADMHN will include dual diagnosis treatment (specific programming for individuals with both a mental illness and a substance abuse disorder) and mental health treatment, psychiatric support and medications.

B. In collaboration Arapahoe County Residential Center (ACRC), the ADMHN program uses a high-intensity, multi-disciplinary approach with residential/transitional housing, mental health and substance abuse treatment, correctional supervision and wrap-around case management services to access community resources for more independent levels of care. Upon arrival at ACRC, program participants will immediately be placed with the SB 97 program. After a stabilization period (approximately 30 days) participants will progress to either an employment track or a volunteer/supported employment track. The program emphasizes integrated treatment of co-occurring mental health and substance abuse disorders, using assertive outreach, intensive case management, comprehensive services, addressing motivation for change, flexibility in services delivery, and IDDT specialized dual disorders treatment.

Cognitive behavioral and psycho-educational classes will address daily living skills, communication skills, vocational skill development, acquisition of resources, safety, education, conditions of parole, interpersonal relationships, safe social and recreational opportunities, community integration, medication compliance, symptom management, self-help and peer support, crisis intervention and counseling, relapse prevention, health and wellness, and residential and permanent housing.

At ADMHN, programs in the Criminal Justice Services unit focus on treating the mental illness, treating co-occurring substance abuse, and changing criminal thinking. The ADMHN Re-Entry Program will reduce recidivism for offenders suffering from mental illness by supporting their placements through focused treatment efforts in the programs listed above. Providing supportive therapy that focuses on reducing the risk factors of mental illness will reduce the risk of repeat offenses. Offenders who are transitioning back into the community face enormous challenges and temptations to return to criminal behavior, especially if they have a mental illness and/or a substance abuse disorder. By offering the mental health treatment, case management, and assistance with medications to ARTS and ACRC clients, the ADMHN Re-Entry Program can help these individuals cope with the stresses of their daily lives and adapt their responses to more successful behavior.

Locations

- Clients of the ARTS Peer I program will be served at the Peer I facility (3732 West Princeton Circle, Denver, CO, 80236), the Haven facility (3630 West Princeton Circle Denver CO 80236) and the OTC Program (1725 High Street Denver CO 80218);
- ACRC clients will be served at the ACRC facility, which is located at 2135 W Chenango Ave Littleton, CO;
- Psychiatric and medication services for ACRC clients will be offered at ADMHNs Adult Outpatient facility at 5500 South Sycamore Street in Littleton, CO.
- The ADMHN Pharmacy is located at 5500 South Sycamore Street, Littleton, CO 80120.

Program Administration

Barbara Becker, PhD, LPC
Manager, Criminal Justice Team
Arapahoe/Douglas Mental Health Network
155 Inverness Drive West, Suite 200
Englewood, CO 80112
303-996-6133

Aurora Mental Health Center(AuMHC) Community Transitions Program
Female Offender Re-Entry Skills Training (FOREST) Program

(The FOREST program is based upon a metaphor of the ecosystem of a forest)

I. The first step in forest recovery is called **Surveying.** This step consists of examining the extent to which the forest is damaged, what strengths the undamaged portion of the forest contains and determining what steps need to taken, in what order, to begin the healing process. The FOREST program is designed to do the same thing with the mentally ill female offenders referred to the program. Once the mentally ill female offender is determined to be appropriate for the FOREST program, the offender will be invited to participate in FOREST program. Prior to the mentally ill female offender beginning the next step, the offender participates in the FOREST initial assessment. This assessment is designed to both determine the current status of the female offender prior to program involvement, identify offender needs, and to serve as a baseline for future assessment to determine the offender's progress.

II. The next stage in the recovery of a forest is the **Re-Organization**. This stage is when the damaged forest begins growing grasses and small brush over the damaged area. These plants are first due to their seeds not requiring as much nutrients and their smallness not taxing the soil as much. The mentally ill female offender begins their involvement with FOREST in much the same fashion. The FOREST program begins within Denver Women's Correctional Facility (DWCF) . This is done in order for the offender to begin receiving and practicing with the skills they will need in society while still within a low demand/low responsibility environment. The primary method of skill training and practice will be within a group therapy setting.

a. The group with meet in ten (10) week increments, repeating the group offering each ten weeks. The group will meet three (3) times a week for one and a half (1.5) hours a group.
b. A maximum of 12 female offenders will be able to be in group at any one time. In the event of an opening developing for any reason, new referrals will be considered for acceptance into the group.
c. The Re-Organization Group program content will consist of linking existing programming that offenders have done in DWCF in regards to trauma, substance abuse, mental health treatment, parenting and other relevant interventions to the utilization of the skills learned in that programming in the transition process, with new program material and extensions of previously learned material.

III. The third stage in the recovery of a forest is the **Aggradations** stage. In this stage transplanted grasses, small brush and create mulch produce organic material that fortifies the soil in the damaged area and prepares it for larger plants and trees. In the FOREST

program, this stage also occurs within DWCF. Members of the group will be selected to receive services in addition to the regular Re-Organization Group in preparation for their departure from the facility and their return to society on parole. Aggradations is structured as follows:

a. A maximum of three (3) female offenders per month will be progressed into transition planning with their AuMHC therapist & an AuMHC case manager. Meetings will be scheduled within DWCF regarding transition planning with the female offender, the DWCF case manager, the AuMHC case manager, and the assigned Community Parole Officer (CPO) scheduled to supervise the offender when they are on parole.

IV. The next stage in the recovery of a forest is the **Transition** stage. During this stage, the forest uses the organic material and nutrients developed in the Aggradations stage for growing larger and larger plants, and allowing significant growths of trees to return to the damaged area. The Transition stage in the FOREST program is the same. This stage occurs when the mentally ill female offender is released from DWCF to begin her parole in the Aurora area. This is the stage when the female offender actually has to utilize all the planning, resources, skills, and training that she has received and put it into practice.

a. Upon the female offender's release, the transportation plans previously set up in the Aggradations stage will be implemented. The AuMHC case manager will make contact with offender that same day to begin actual integration into AuMHC system. The offender is scheduled for frequent contact with AuMHC case manager to assure making needed connection with AuMHC system as well as following up on the offender's resource and benefits status and any needed documentation regarding outstanding applications or community contacts. The offender will have continued contact with the AuMHC case manager. The frequency of this contact is contingent on the level of identified offender need. The minimal standard of contact between the AuMHC case manager and the offender will be no less than once a month as long as offender is in program.

V. The last stage in the recovery of a forest is the **Steady State**. In this stage the forest has returned to it's pre-disturbance state and the developed ecosystem is stable and integrated. This is the desired goal for the mentally ill female offender involved in the FOREST program. The offender should be established within the community, be able to meet their personal and therapeutic needs and maintain themselves as a contributing member of society to best of the ability.

Mark W. Olson, M.S., CACIII, LPC
Program Manager;
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Aurora, Colorado 80011
(303) 341-004

The Mental Health Center Serving Boulder and Broomfield Counties

2nd ACT

The 2nd ACT Program serves people on parole to the Colorado Department of Corrections, who live in Boulder or Broomfield Counties, and who have a serious mental illness. The team is multi-disciplinary, including that the assigned parole officer is part of the team. The services are based on the Assertive Community Treatment model, and include treatment for substance abuse disorders.

The main goals of the program are to improve parolees' transition to the community and to reduce returns to prison. People, who have serious mental illness and criminal justice involvement, often fail in their attempts to re-integrate into the community. This program, located in Longmont, can also link clients to the other services provided by The Mental Health Center Serving Boulder and Broomfield Counties. Some of these are: Clubhouse, drop-in, residential, and patient assistance for medication, and peer support. Clients can transition to less-intensive programs as they become integrated into the community, and successfully complete their parole. Other goals are to improve employment or benefit acquisition, prevent hospitalization, and improve participants' success in the community.

2nd ACT is located at the Longmont branch of The Mental Health Center Serving Boulder and Broomfield Counties, at 529 Coffman, on the third floor.

Location:

2nd ACT
Suite 300
529 Coffman
Longmont, Colorado 80501

Contacts:

Suzi Mandics	James Evans	Charlotte Wollesen
ACT Coordinator	Team Leader	Clinical Director
303-684-0555	303-684-0555	303-413-6255

Community Reach Center

Adult Forensic Program/CESE/Adam's County Jail

Community Engagement, Supervision, & Evaluation (CESE) Program

CESE Program Status Report:

- Total number of CESE Participants as of 12/31/2009: 71
- Total CESE Graduates since program inception: 18
- Total number of CESE graduates who return to ACDF Jail, Prison, or other Colorado jails for either a technical violation or a new charge three years post graduation. 1
- Unsuccessfully Discharged CESE Participants: 33

CESE Program Description: Our goals and objectives are focused on how to best serve both the mental health needs of our consumers but also to serve our community by improving safety and wellness. The CESE Program accepts clients with misdemeanors and non-violent felonies. Violent felonies are assessed on a case by case basis. Charges include assaults, DUIs, and domestic violence. We are pleased to report that our CESE Board unanimous agreed to three specific measures of recidivism: (1) returns to either jail or prison for either technical violations or new charges, (2) conviction of a legal charge after their graduation from CESE, and (3) number of days spent in jail before, during and one year post-CESE graduation.

Services Provided: CESE clients are first assessed by the CESE therapist and probation officer either while out on bond or at the Adams County Jail. Once assessed, they are screened by a panel of mental health clinicians at Community Reach Center. This panel includes the program manager, therapist, nurse supervisor, probation officer, case manager and psychiatrist. Once screened, clients are either accepted into the program or denied. Once accepted into the program, clients are sentenced to CESE as a condition of 17th Judicial District Probation. They begin intensive services and are seen between three and five times per week, depending on their needs and level of supervision. Clients also meet with the case manager to immediately begin working on housing attainment, benefit acquisition, food stamps and so on. Some clients come specifically for their appointments and to check in with the probation officer, while others attend daily to check in, receive medications, receive daily BA, or in some cases simply to develop a sense of structure and purpose. Specific services which are provided include:

- Group & Individual Therapy including but not limited to: DBT, CBT and IDDT
- Probation Supervision & Monitoring
- Medication Management
- Periodic sobriety testing via breathalyzers, urine screens and/or oral swabs

Collaboration with Stakeholders: The CESE Program is a collaboration of Adams County Sheriff's Office, Adams County Public Defender's Office, Adams County District Court, 17th Judicial District Attorney, 17th

Judicial District Probation and Community Reach Center. A Business Associate Agreement is in place and is reviewed periodically with all Stakeholders/CESE Board members. Additionally, some of the CESE Board members all attend the monthly Metro Area County Commissioners (MACC) Mentally Ill Inmates Task Force (MIITF) subcommittee meetings which address jail diversion, as well as how to treat mentally ill individuals within the justice system.

Colorado West Regional Mental Health, Inc.

"Bringing Hope"

There are two major components to the Fifth Judicial District's SB 97 project. They include: (A) Continuation of the Triage Unit in Frisco, and, (B) Continuation from the fourth quarter of last year's funding of the Eagle County Jail Services. Both these programs identify possible and current inmates by creating access to mental health care after appropriate assessment to reduce mental health problems that exacerbate a client's involvement in the criminal justice system. By early identification and continued mental health-related support, we have reduced the likelihood of client's recidivating back into the criminal justice system. Thus, by developing such systems of care, as compared to the past, we can provide mental health services that are more proactive rather than reactive to reduce incarceration for this target population.

In the Triage Unit, after medical clearance, we are focusing on a target population of adults from Summit, Eagle, Lake, and Grand Counties who might have criminal charges and are at risk of harming self/others and/or gravely disabled but do not presently meet the mental health hold guidelines under an M-1. Some of these clients may transfer to this type of service after they are clean or sober from the detox side of the Summit County Triage Unit.

The jail program screens and identifies all adult inmates and then targets those with mental health disorders based on a mental health professional's recommendations. Additionally, referrals can come from jail personnel based on inmates who show some evidence of a mental health disorder, or is an inmate requesting mental health services, or is a client previously seen at our out-patient clinics, or there are concerns related to safety, such as risk of hurting self and/or others.

Jail services occur once a month for medication purposes and all Eagle County inmates are screened by the mental health professional for recommendations. Those who need on-going services are seen bi-weekly, weekly, or as required by their treatment plan. Again this frequency would be dictated by the offender's treatment plan. The duration of treatment is based on what the mental health concerns may be and, therefore, could vary. There will also be a Coping Skills Jail Group developed by 9/1/08. This will be an open-ended psycho-educational class that will repeat itself on a yet to be determined basis.

Contact Information:

Summit County: (Ask to speak with MH Professional)	Kathy Davis	970-668-3478	Emergency Staff	911
Grand County:	Krista McClinton	970-328-6969	Emergency Staff	970-479-2200
Lake County:	Mandy Baker	719-486-0985	Emergency Staff	800-809-2344

RecoverFree

RecoverFree is a program offered by Colorado West with the aim to reduce the numbers of persons who have a mental illness, struggle with substance abuse, and who are at risk of or already involved in the criminal justice system. The primary goal of this program is to reduce the number of contacts with law enforcement, to reduce or prevent time in jail, and to reduce recidivism rates for these individuals. RecoverFree includes immediate community-based crisis assessment and counseling, assertive outreach and engagement practices, specialized treatment groups, community based case management activities, and social/peer support network. The Crisis Response Team and RecoverFree program will continue to fill an important gap in the Mesa County service system by providing targeted, intensive treatment services to adults most in need. It will also provide the continuum of services for youth transitioning from the juvenile system and treatment modalities.

In FY 09, CWRMH has expanded the **RecoverFree** program to include a community-based, mobile Crisis Response Team. This team will provide 24-hour access to mental health assessments and crisis case management services. This expansion of services will continue to assist in reducing recidivism rates for offenders suffering from mental illness and co-occurring disorders by providing timely access to differential mental health and substance abuse assessments, case management and specialized treatment services. To access the mobile Crisis Response Team, call 970-241-6022.

The continuum of Services will range from initial contact with the Crisis Response Team and can include phone consultation/support, differential face-to-face assessment, short-term counseling/stabilization services, and case management to link with ongoing treatment programs. The RecoverFree Program will continue to offer a variety of services (Track I and Track II) that best meet the individual's clinical and recovery needs. Services will range from 3 to 9 hours per week – including group therapies, individual therapy, case management, consumer peer specialist support, and psychiatric evaluation and medication management services. Average length of stay in the most intensive of services will be 6 months. The following modalities may be used: Dialectical Behavioral Therapy, Strategies for Self Improvement and Change, Individual CBT, Mind Over Mood Group, Integrated Dual Diagnosis Treatment, The Matrix Model, The Basics "A curriculum for co-occurring psychiatric and substance disorders. Psychosocial interventions will include socialization opportunities through the Oasis Club House, Vocational Training and Supported Employment opportunities through Production Services, and Supported Housing opportunities through Little Bookcliff Apartments (owned and operated by CWRMH).

Please contact Audra Stock at (970) 241-6023 for additional information.

Jefferson Center for Mental Health

JERP is a unique collaboration between the community mental health and corrections systems in one of the largest and most geographically diverse counties in Colorado. The program was developed to increase public safety and reduce criminal recidivism by providing wrap-around services to prison inmates who are diagnosed with serious and persistent mental illness and are paroling to Jefferson County. Jefferson Center for Mental Health, Interventions Community Corrections Services (ICCS) and the Department of Corrections (DOC), Colorado Department of Public Safety-Division of Criminal Justice and Jefferson County Justice Services are the partners for this special program that provides transitional housing, wrap around mental health and substance abuse treatment, community re-integration and correctional supervision services. A multidisciplinary team, comprised of a full-time ICCS Case Manager, a full-time DOC Parole Officer, two full time Jefferson Center mental health/substance abuse clinicians, a part-time Jefferson Center nurse and supervision from all three entities work to assess, evaluate and provide services to offenders. With SB 97 funding, the program has been expanded to include a Transition Case Manager to assist with obtaining/locating referrals from DOC into JERP and then from JERP to community, upon completion of the residential program.

Services Provided

* Mental Health Treatment (individual and group)
* Substance Abuse Treatment
* Integrated Dual Disorder Treatment (IDDT)
* Cognitive Behavioral Therapy (CBT)
* Peer Mentoring and Peer Support
* Psychiatric Services
* Medication Monitoring and Nursing Services
* Pre-Vocational Support
* Education (GED, college course work)
* Clubhouse and Supported Employment
* Benefits Acquisition
* Assistance with Housing in Community
* Family Therapy
* Wellness Programs/Services
* Community Integration
* Case Management and Crisis Intervention
* Homeless Prevention Services

Contact Information:

Lori Swanson-Lamm, Director of Intensive Services 303-432-5425

CrossRoads

CrossRoads is a successful pilot program initially developed with funding from SAMHSA to provide intensive mental health and substance abuse treatment to youth on probation. With funding from SB 97, CrossRoads was expanded to accommodate the needs of youth at various points along the juvenile justice spectrum and expanded the age range of children served to ages 10-22.

CrossRoads targets adolescents and young adults who have mental health issues and are at risk of juvenile justice involvement, or have been municipally charged, and/or are on probation. Youth are referred through the Jefferson County Juvenile Assessment Center (JCJAC), the 1st Judicial Probation Department, Truancy Court or other Jefferson Center programs. Referring partners determines referral eligibility through the Maysi-2 mental health screening tool.

The youth referred to CrossRoads will demonstrate a range of mental health issues, including depression, anxiety, bi-polar, and ADHD. Based on Jefferson Center's experience with the CrossRoads population, many of these youth will enter the system with co-occurring mental health and substance abuse issues. Often these youth are experiencing challenges in multiple systems, including schools, communities and families. Providing appropriate services and interventions early on in a youth's juvenile justice trajectory helps steer youth to a more positive path. CrossRoads offers age-appropriate services at The ROAD, a youth drop-in center at 6175 West 38th Avenue in Wheat Ridge and the new JAC site on the 6th Ave. frontage Road between Simms and Kipling, in Lakewood. Services will be available Mon- Fri from 9- 6 with occasional evening hours. In-home service can be provided when necessary.
Many of the services and supports offered through CrossRoads are essential to the healthy development of any adolescent, but because these youth have combined issues of mental health and a history with the juvenile justice system, the services and supports are even more critical. CrossRoads will offer an array of services that will be individualized based on the needs of specific youth and their families. Services may include:

- Aggression Replacement Therapy
- Life Skills Training
- Substance Abuse Counseling
- Individual, Group and Family Therapy
- Medication evaluations
- Process groups
- Mentoring
- GED tutoring
- Employment Training
- Wraparound Services
- Multi Systemic Therapy (MST)
- Functional Family Therapy (FFT)
- Cognitive Behavioral Therapy (CBT)

A typical intervention is 3-6 months, based upon the individual needs of the clients. For additional information contact the CrossRoads Program at 303-432-5851. Additionally you may contact Linda Nordin 303-432-5200, Director of Family Services at Jefferson Center.

Larimer Center for Mental Health Alternatives Program

Recognizing the critical need to reduce the incredible cost the mentally ill and addicted populations represent to Larimer County, Larimer Center for Mental Health has created the *LCMH Alternatives* program. *Alternatives* combines intensive mental health and drug and alcohol treatment with intervention in the factors known to contribute to criminal behavior and the systemic factors (i.e., family, job, education, inappropriate behaviors, social networks, and housing) that often impede successful return to society.

An integrated service delivery program grounded in the "Sequential Intercept Model" (Drs. Mark Munetz and Patricia Griffin), *Alternatives* mitigates recidivism by creating accessible, comprehensive and effective mental health treatment for the criminal justice population through implementation of a continuum of services which meet the needs of this high needs population. *Alternatives* is composed of four distinct components: Alternatives to Incarceration for Individuals with Mental Health Needs (AIIM), Community Dual Disorder Treatment (CDDT), Larimer County Offender Reentry Program (Reentry), all of which are supported by the Center's residential services. Each of these programs is also integrated in terms of providing services for mental health, substance abuse, primary health, transportation, housing, employment and family-of-origin needs.

AIIM is a collaborative program jointly developed and supported by many Larimer County and nonprofit agencies. The program is an alternative to incarceration that provides services and supervision to first time and repeat offender adults who are involved in the criminal justice system due to their mental illness. Supervision and treatment to offenders as well as monitored medications, substance abuse testing, and intensive case management assistance with basic needs, housing and employment are all integral parts of the AIIM program.

The Community Dual Disorder Treatment program is a community-based, multidisciplinary program that provides coordated treatment based on the evidence-based practice Integrated Dual Disorders Treatment (IDDT). CDDT provides intensive mental health and substance abuse counseling, case management, medical services, housing/residential services, supported employment, and pharmacological treatment in an Assertive Community Treatment (ACT) model.

The Reentry Program is the newest in the County's array of alternative programs inended to reduce recidivsm and restore offenders to productive citizens. It also is a joint venture between many county and service agencies in Larimer County. The program is approxiamately 180 dyas in length, and participation is strictly voluntary. Offenders who enter the program but fail to meet program requirements are subject to appropriate consequences, including termination from the program and return to the regular jail regimen for the completion of their sentence.

Alternatives is operated out of the Larimer Center for Mental Health office at 525 W. Oak St., Ft. Collins, CO, and is directed by Kathy Forrest, Director of North County Services. Ms. Forrest may be reached at (970) 494-4342 or kathy.forrest@larimercenter.org.

Mental Health Center of Denver

Denver Criminal Justice Initiative

MHCD's mission ***"Enriching Lives and Minds by Focusing on Strengths and Recovery"*** is the guiding force behind our strengths-based, recovery oriented treatment philosophy. Consumers are involved with shaping their own recovery which gives them a real chance to regain control over their lives. A large segment of the offender population has experienced homelessness, which has its own unique culture and values. Another important consideration is the large percentage of participants who have a history of trauma or exposure to violence. It is challenging to identify the belief systems of an entire group of individuals, each with distinct life experiences, cultures and belief systems. Through development of an individualized service plan at program entry, an individual's own cultural considerations will be honored and incorporated into treatment planning thus increasing the likelihood of successful recovery.

In September 2007, MHCD implemented a mental health service program for juvenile and adult offenders with mental health problems who are involved in the criminal justice system, the Denver Criminal Justice Initiative (DCJI), with funding from Senate Bill 07-097 provided through the Colorado Division of Mental Health. The DCJI program has increased community capacity to outreach and engage adult offenders into evidence based practices such as Assertive Community Treatment (ACT), Integrated Dual Diagnosis Treatment (IDDT), Dialectical Behavioral Therapy (DBT) and the Trauma Recovery and Empowerment Program (TREM). These evidence-based treatment services have been demonstrated to reduce recidivism, mental health symptoms and substance abuse issues over the course of treatment.

The program also allowed MHCD to increase capacity for juvenile offenders in the Intensive In-home Family Therapy and the Systems of Care/Family Advocacy programs which employ family-focused interventions supported by community-based wraparound child and family support plans. The treatment interventions include structural strategies designed to change patterns and practices in family subsystems that may contribute to delinquent behavior. The additional funding provided in fiscal year 2009-10 was used to add a school-based clinician at Smiley Middle School.

The mental health status and recovery service needs of offenders referred to MHCD for admission to the DCJI program are assessed through a Contact and Triage form completed at the time of the initial referral, and a Multidisciplinary Assessment Tool and the Colorado Client Assessment Record completed through a clinical interview at the time of admission. In addition, the mental health and recovery status of adult offenders are assessed at admission and at six (6) month intervals using MHCD's proprietary Recovery Needs Level Rating instrument.

Target Population of Adults:

- Adults, 18 years and older;
- Who are diagnosed by a mental health professional as having a Serious Mental Illness (SMI);
- Who are involved in the criminal justice system (defined as charged with or adjudicated for an offense); and
- Who reside in or are homeless within the City and County of Denver.

Target Population of Juveniles:

- Youth between the ages of 10-17;
- Who are diagnosed by a mental health professional as having a Serious Emotional Disorder (SED);
- Who are involved with the juvenile justice system; and/or
- Youth with co-occurring disorders of mental illness and substance abuse.

Contact Information

Administrative	Adult Program	Juvenile Program
Beth Coleman, MS Director of Managed Care 4141 E. Dickenson Place Denver, CO 80222 Beth.Coleman@mhcd.org 303-504-6630	Jay Flynn, JD Deputy Director Adult Recovery Services 1733 Vine Street Denver, CO 80206 Jay.Flynn@mhcd.org 303-504-1035	Dawn Wilson, PhD Intensive In-Home Services Program Manager 1405 N. Federal Blvd. Denver, Co 80204 Dawn.Wilson@mhcd.org 303-504-1513

Behavioral Alternative Services

The Behavioral Alternative Services In Community (BASIC) Team takes a unique approach to working with individuals who have legal involvement because of their mental health and/or substance abuse disorder. It is a fully integrated team with professionals from both the mental health and substance abuse fields (employed by NRBH and IGRTC). The staff is cross-trained in assessing and treating co-occurring disorders. The team works closely with the In-Custody Alternative Placement Program (ICAPP) of Weld County to identify and divert individuals with mental health and/or substance abuse issues from custody and maintain them in the community. The ICAPP committee consists of representatives from the court system (District Attorney and Public Defender) the legal system (jail, probation, and parole) and providers (Avalon, Island Grove and North Range). Members of the group provide screening and oversight for the project.

The goal of the team is to reduce jail time for individuals whose mental illness and/or addiction has lead to involvement with the legal system. These individuals often languish in incarceration for longer periods of time than the average inmate due to their behavioral health issues. They often have housing issues and have few or no vocational skills and thus need more than outpatient therapy to successfully pursue recovery.

The program utilizes a thorough assessment of clinical, legal and community/client safety concerns followed by services in the appropriate level of care. Some individuals will receive services from Acute Services (Detox), Transitional Residential Treatment (TRT), or the Acute Treatment Unit (ATU) with adjunctive case management and discharge planning from BASIC during their stay and will move to lower levels of care when ready. Others will start with the outpatient treatment and support with or without residential placement depending upon needs. The outpatient services are delivered according to the Integrated Dual Disorder Treatment (IDDT) model of care and/or other treatment models as appropriate to meet the needs of an individual client. The Treatment Team consists of clinical staff working on BASIC, providers within the residential/treatment team and appropriate legal representatives from such entities as Probation, Parole, or Pre-trial Diversion. This group meets regularly to adjust the service plan so that adequate services are provided to ensure recovery and to maintain community safety.

Location: Island Grove Regional Treatment Center, 1260 H Street, Greeley, CO 80631

Contacts:

Dana Wellman
Program Manager
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Jacki Kennedy
Crisis Stabilization Director
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Pikes Peak Behavioral Health

A Project for Reducing Recidivism among Adults with

Moderate to Severe Behavioral Health Diagnoses in the El Paso County Jail

Mailing Address

Pikes Peak Mental Health
875 W. Moreno Avenue
Colorado Springs, CO 80905

Service Address

El Paso County Criminal Justice Center
2739 E Las Vegas St
Colorado Springs, CO 80906

Program Contacts:
Maria Berger, Program Manager
mariab@ppbhg.org
(719) 572-6279

Background:

In the last decade, jails in El Paso County have experienced a dramatic rise in the number of inmates with serious mental illness. Unfortunately, the El Paso County Jail, has limited resources to provide the long-term and often intensive behavioral health services needed by this population. During their incarceration period in the County Jail, inmates with mental illness receive psychiatric care and medications provided by jail mental health staff. Prior to the initiation of this SB 97 project in late 2007, the release of those inmates who could not or chose to not continue behavioral health care after incarceration marked the end of any psychiatric stabilization attained in jail. They were released back into the community, were often homeless, and quickly abused substances and/or decompensated and entered the criminal justice system again. Through this project, these individuals receive tailored outreach and interventions to become engaged in behavioral health treatment and receive services that reduce their risk of recidivism.

Program Description:

Mental health staff members at the El Paso County Jail identify individuals in the target population that are eligible for the project, and refer them to a project clinician/case manager. Thus, jail behavioral health personnel perform the first behavioral health evaluation, based on DSM IV standards, on all potential participants before they are referred to the project. After project referral, the PPMH clinician uses a standardized intake assessment tool to assess past and present symptomology, psychosocial history, and current DSM IV diagnosis

This project targets those inmates in the County Jail with the following characteristics:

- Ages 18 and older, males and females, no exclusions based on race or ethnicity
- Diagnosis of mental illness, which may co-occur with a substance use disorder
- History of recidivism in the jail system within the past 12 months
- History of being placed on a mental health alert while in El Paso County Jail

- Pre- or Post-Trial, Pre- or Post-Sentenced" No exclusion based on charges
- Not currently in treatment for behavioral health or substance abuse problems

Based on the assessment information, a treatment plan is written. A project clinician/case manager continues to provide services to clients until their services have been taken over by Pikes Peak Mental Health in partnership with key community supports. The goal is to have a successful transition from stabilization in this phase to services at the mental health center within ~90 days. The type and duration of services depends on the individual needs of each client. These services may include psychiatric assessment; psychotropic medications; group, individual, or family therapy; case management; 24 hour acute stabilization and detox; assistance with benefit acquisition, housing, and/or other social services such as medical care; or vocational services.

SB-97 Treatment Alternatives Collaboration (TAC) Program

In collaboration with local law enforcement and other criminal justice agencies, Spanish Peaks Mental Health Center created the **Treatment Alternatives Collaboration (TAC) Program** in July 2008. This program is funded by monies received by Spanish Peaks Mental Health Center through Senate Bill 97. The TAC Program targets adults with mental illness and/or co-occurring substance abuse disorders who are currently involved with the criminal justice system.

TAC Program Partners/ Memorandum of Understanding (MOU) Participants:

- Spanish Peaks Mental Health Center
- Tenth Judicial District Combined Courts
- The Pueblo Police Department
- The Pueblo County Sheriffs' Office and County Jail
- Pueblo Parole Office
- Tenth Judicial District Attorney's Office
- Pueblo Office of the Public Defender
- Tenth Judicial District Probation Department

We work together to identify offenders who could benefit from treatment alternatives to incarceration to reduce recidivism, and related costs to the criminal justice system, and increase availability of treatment.

The TAC Program currently has the capacity to serve 50 adult offenders, at any given time. We have received over 200 referrals during the first two years of the program. Using the conceptual framework of the Sequential Intercept Model, adult offenders are identified, intercepted and diverted at all points in the criminal justice system.

TAC Program Interventions:

- **Law Enforcement Patrol Level Interventions**: All police and sheriff's deputies in Pueblo have been trained by TAC staff on the protocol and criteria for referring individuals to the TAC Program. Officers can make direct referrals or can request that their dispatch make a referral. The TAC Case Manager makes contact with each referral within 72 hours to assess for possible admission to the TAC Program.
- **Pre-Filing Diversion**: **Deferred Prosecution:** We have worked with the District Attorney's Office to create a procedure that allows the Deputy District Attorney to refer a case to the TAC Program for a period of 6-24 months, in lieu of prosecution. Upon successful completion of the TAC program, charges are dismissed.
- **TAC as a Condition of Bond:** The TAC Program can accept individuals, as appropriate, into the program as a condition of bond, enabling them to be released from jail sooner. We do assessments at the jail, when necessary. These clients are then often sentenced to TAC and probation.

- **Sentencing to TAC in lieu of DOC/Jail time:** The TAC Program accepts clients who are sentenced to TAC and Probation, or only the TAC program, in lieu of sentencing to DOC/ Jail time.
- **Probation and Parole:** For many of our clients, participation in the TAC Treatment Program is a condition of their probation/parole.

Services Provided:

Utilizing an integrated treatment approach, clients enrolled in the TAC Program may receive:

- Integrated outpatient mental health and substance abuse treatment based on individual needs
- Evidence-Based Treatment: CBT, DBT, REBT, MRT and Motivational Interviewing
- Intensive residential treatment, as needed.
- Transitional Employment (TE) and Supported Employment (SE) opportunities
- Case Management Services
- Psychiatric services/ Medication Management
- Assistance with benefits acquisition, referral to vocational rehabilitation/employment, and housing resources.
- For clients with more acute illness and need for intensive treatment, we have a 24-hour Acute Treatment Unit (ATU
- Access to consumer-run Recovery Center

Additionally, SPMHC helps to coordinate and provide two Crisis Intervention Trainings (CIT) each year for post-certified law enforcement officers. This training increases officers' knowledge and their ability to identify and interact with people who may have a mental illness.

SPMHC TAC Program Contacts:

Lisa La Rose, MA, LPC
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Appendix G
Managing addiction as a chronic condition

Managing Addiction as a Chronic Condition

This article reviews progress in adapting addiction treatment to respond more fully to the chronic nature of most patients' problems. After reviewing evidence that the natural history of addiction involves recurrent cycles of relapse and recovery, we discuss emerging approaches to recovery management, including techniques for improving the continuity of care, monitoring during periods of abstinence, and early reintervention; recent developments in the field related to self-management, mutual aid, and other recovery supports; and system-level interventions. We also address the importance of adjusting treatment funding and organizational structures to better meet the needs of individuals with a chronic disease.

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Historically, addiction treatment systems and research have been organized to provide and improve the outcomes of acute episodes of care. The conceptual model has been that an addicted person seeks treatment, completes an assessment, receives treatment, and is discharged, all in a period of weeks or months. This orientation stands at variance with clinical experience and studies conducted over several decades, which confirm that, although some individuals can be successfully treated within an acute care framework, more than half the patients entering publicly funded addiction programs require multiple episodes of treatment over several years to achieve and sustain recovery (Dennis et al., 2005; Dennis, Foss, and Scott, 2007). The progress of many patients is marked by cycles of recovery, relapse, and repeated treatments, often spanning many years before eventuating in stable recovery, permanent disability, or death (Anglin et al., 2001; Anglin, Hser, and Grella, 1997; Dennis, Scott, and Funk, 2003; Hser et al., 1997, 2001; McLellan et al., 2000; Scott, Dennis, and Foss, 2005; Scott, Foss, and Dennis, 2005; Simpson, Joe, and Broome, 2002; Weisner et al., 2004; Weisner, Matzger, and Kaskutas, 2003; White, 1996).

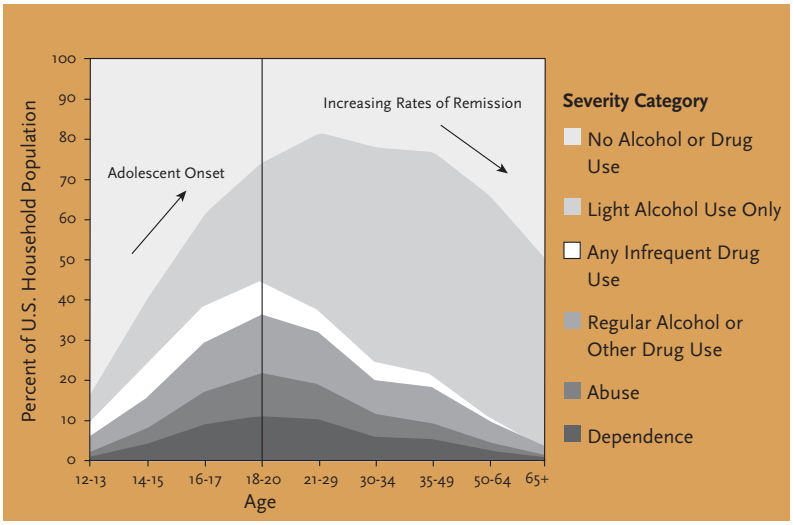
The traditional acute care approach to drug abuse has encouraged people to suppose that patients entering addiction treatment should be cured and able to maintain lifelong abstinence following a single episode of specialized treatment. Accordingly, policymakers allocate limited public health dollars for addiction treatment; insurers restrict the number of patient days and visits covered; treatment centers make no infrastructure allowance for ongoing monitoring; and families and the public become impatient when patients relapse (McLellan et al., 2000).

The mismatch between the typical natural history of substance use disorders (SUDs) and treatment models and expectations reduces our ability to help addicted individuals. In this overview, we define SUDs, highlight their chronic features, discuss several recently developed techniques to manage SUDs over time, and present information that can help guide systems and programs in adapting to a chronic care approach to SUDs.

CHRONICITY OF SUDS

The American Psychiatric Association (APA; 2000) and World Health Organization (WHO; 1999) define addiction as a chronic, tenacious pattern of substance use and related problems; they distinguish two types of SUDs: dependence and abuse (the latter called "hazardous use" by the WHO). The definition of substance dependence implies chronicity: Symptoms—including increased tolerance for the substance, inability to abstain, replacement of healthy activities with substance use, and continued use despite medical or psychological problems—have been present for longer than 12 months and are likely to persist if left untreated. Substance abuse applies when people do not meet the dependence criteria, but report at least one moderately severe substance-related symptom that puts them at high risk for harming themselves or others and for developing dependence. Dependence requires treatment, and abuse generally results in referral to brief intervention or treatment.

FIGURE 1. Substance Use Disorders Begin in Adolescence and Last for Decades



In the U.S. household population in 2001, the percentage of people who reported substance dependence or abuse rose through the adolescent age groups to peak among the 18- to 20-year-olds, and declined through subsequent age groups (OAS, 2002).

A growing body of neuroimaging studies provides evidence that a physiological basis underlies the clinical experience of SUD chronicity (Fowler et al., 2007). These studies demonstrate that cravings, cue reactivity, tolerance, and withdrawal can be seen in the brain; that they interact with brain development (particularly among adolescents); that they respond to medications as well as social and physical environment; and that chronic substance use is associated with physical changes in the brain that have an impact on brain functioning and emotional states (Chang et al., 2005, 2006; Kufahl et al., 2005; Paulus, Tapert, and Schuckit, 2005; Risinger et al., 2005; Schlaepfer et al., 2006; Volkow, Fowler, and Wang, 2003, 2004).

Epidemiological Indicators of Chronicity

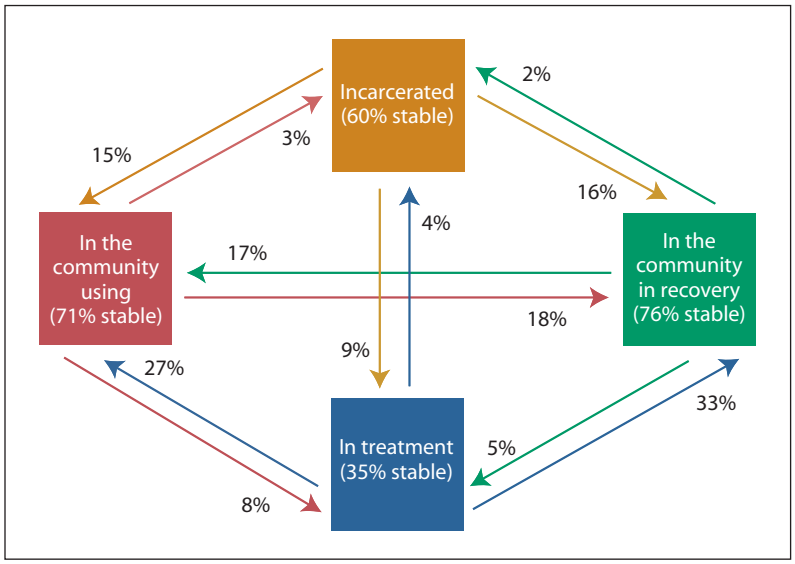
Of the 235 million people aged 12 and over in the U.S. household population in 2001, 5 percent met the criteria for substance dependence, and 4 percent met the criteria for substance abuse in the past year (Office of Applied Studies (OAS), 2002). Epidemiological data affirm that SUDs typically follow a chronic course, developing during adolescence and lasting for several decades. Some 90 percent of all individuals with dependence started using before the age of 18, and half started before the age of 15 (Dennis et al., 2002). In the U.S. population as a whole, the prevalence of dependence and abuse rises through the teen years, peaks at around 20 percent between ages 18 and 20, then declines gradually over the next four decades (Figure 1; OAS, 2002). A significant portion of older nonusers are people in recovery. In studies of community (Dawson, 1996; Kessler, 1994; Robins and Regier, 1991) and treatment (Dennis et al., 2005) populations, between 58 and 60 percent of people who met the criteria for an SUD at some time in their lives eventually achieved sustained recovery—that is, they had no dependence or abuse symptoms for the past year. Most who recover do so only after at least one episode of treatment (Cunningham, 1999*a*, 1999*b*).

People who enter treatment are a distinct subgroup of substance users whose problems are particularly severe and intractable. Among people in publicly funded addiction treatment in 2002, 62 percent met the diagnostic criteria for dependence; 16 percent met the criteria for abuse; and 22 percent were admitted for other subclinical substance-related problems (e.g., acute intoxication, mental health problems aggravated by substance use; OAS, 2005). Of people admitted to U.S. public

programs in 2003, 64 percent were reentering treatment: 23 percent for the second time, 22 percent for the third or fourth time, and 19 percent for the fifth or more time (OAS, 2005). In fact, numerous longitudinal studies have shown that, on average, people reach sustained abstinence only after three to four episodes of different kinds of treatment over a number of years (Anglin, Hser, and Grella, 1997; Dennis et al., 2005; Grella and Joshi, 1999; Hser et al., 1997, 1998; Scott, Dennis, and Foss, 2005; Scott, Foss, and Dennis, 2005). In one longitudinal study with 1,271 patients, the estimated median time from first use to at least 1 drug-free year was 27 years, and the median time from first treatment to 1 alcohol- and drug-free year was 9 years with three to four episodes of treatment (Dennis et al., 2005).

In sum, most patients in publicly funded addiction treatment have SUDs and require multiple treatment episodes over several years to reach stable recovery. For optimal outcomes, treatment systems and interventions should be able to address the long-term aspects and cyclical dynamics of the disorder.

FIGURE 2. The Pathway to Recovery Is Cyclical



Over a 2-year period, 82 percent of drug users transitioned one or more times between use, incarceration, treatment, and recovery. An average of 32 percent changed every 90 days, with movement in every direction and treatment increasing the likelihood of getting to recovery (Scott, Foss, and Dennis, 2005).

Inside the Cycles of Recovery and Relapse

In a recent study, Scott and colleagues provided insight into the factors influencing 448 patients' transitions between relapse, treatment reentry, incarceration, and recovery (Scott, Dennis, and Foss, 2005). Over 2 years of monitoring, 82 percent transitioned at least once, and 62 percent moved multiple times (Figure 2). In an average quarter, 32 percent of the patients moved from one status to another.

Several variables predicted the transitions. Patients with higher substance use severity and environmental obstacles to recovery—for example, substance use in the home, family problems, and victimization—were less likely to transition from drug use to recovery or treatment (i.e., the individuals most in need of treatment were the least likely to re-enroll on their own). Patients were more likely to transition from use to recovery when they believed their problems could be solved, desired help with their problems, reported high self-efficacy to resist substance use, and received addiction treatment during the quarter.

Scott and colleagues conducted a second study, this time with 1,326 adult patients over a 3-year period, that looked at annual transitions (Scott, Foss, and Dennis, 2005). More than 83 percent of the participants transitioned from one point in the cycle to another during the 3 years (including 36 percent who transitioned twice and 14 percent who transitioned three times). Treatment participation was again a primary correlate of the transition from use to recovery. The odds ratio of transitioning from use to recovery went up 1.14 for every 9 weeks of treatment received during the year. Among patients who started the year in recovery, the major predictor of whether they maintained abstinence was not treatment, but their level of self-help group participation. The odds ratio of relapse went down 0.55 for every 77 days of self-help group attendance.

Factors Affecting the Duration of SUDs

The age at first substance use and the duration of use before starting treatment are related to the length of time it takes people to reach at least 1 year of alcohol and drug abstinence. Scott and colleagues found that the median time of use was significantly longer for people who started before age 15 than for those who started after age 20 (29 vs. 18 years; Scott, Dennis, and Foss, 2005). Patients who began treatment within 10 years of their initial drug use achieved a year or more of abstinence after an average of 15 years, compared with 35 or more years among those who entered treatment after 20 or more years of use. These results clearly establish the need to diagnose and intervene as early as possible, ideally during the first decade of use.

The Impact of Co-Occurring Problems

As clinicians and researchers are aware, individuals with SUDs have high rates of additional health and social burdens that increase the difficulty of treatment: psychiatric problems, HIV risk behaviors, violence, illegal activity and involvement in the criminal justice system, service utilization, homelessness, and a wide range of vocational problems (Center for Substance Abuse Treatment, 2000; Compton, Lamb, and Fletcher, 1995; Epstein, 2002; Grant, 2000; Hasin et al., 1997*a*, 1997*b*; Jaffe, 1993; Kessler et al., 1996; Langenbucher, Morgenstern, and Miller, 1995; Lennox, Scott-Lennox, and Bohlig, 1993; Lennox, Scott-Lennox, and Holder, 1992; Lennox, Zarkin, and Bray, 1996; Mark et al., 2001; Regier et al., 1990; Woody, Cottler, and Cacciola, 1993). Patients who abuse multiple substances or have other co-occurring problems are more likely to experience difficulties with treatment/medication adherence, shorter stays, administrative discharges, compromised functional status, difficult community adjustment, reduced quality of life, and worse outcomes (e.g., Brooner et al., 1997; Ford, Snowden, and Walser, 1991; Hien et al., 1997; McLellan et al., 1983; Mueser et al., 1990; Project MATCH Research Group, 1997; Ross, Glaser, and Germanson, 1988; Rounsaville et al., 1982, 1986; Weisner, Matzger, and Kaskutas, 2003; White et al., 2005). Clinical trials have demonstrated that when patients have an SUD combined with one or more non-substance-related disorders, it can be more effective—in terms of both clinical outcome and cost—to provide integrated care (Parthasarathy et al., 2003; Willenbring, 2005).

Systems that offer both inpatient and outpatient care for SUDs cost more to maintain, but save more in social costs.

EMERGING APPROACHES TO RECOVERY MANAGEMENT

Recently, clinicians and researchers have generated several new approaches to improve the long-term management of an SUD by responding to its chronic nature. Underlying the approaches are three strategies:

- Improve the continuity of care;
- Use monitoring and early reintervention; and
- Provide other recovery support.

Improving Continuity of Care

During the years- or decades-long course of an SUD, patients need varying levels of care. In periods of intensified symptoms, a patient may be able to cope best by retreating from the community to a specialized inpatient or intensive outpatient setting. Conversely, reentry into the community at the conclusion of an intensive treatment episode marks the beginning of a new state of risk related to continuing biobehavioral vulnerability and environmental exposures.

Accordingly, the APA (1995), the American Society of Addiction Medicine (2001), and the Department of Veterans Affairs Office of Quality and Performance (www.oqp.med.va.gov/cpg/SUD/SUD_Base.htm) have issued clinical practice guidelines recommending that patients being discharged from intensive levels of addiction treatment be transferred to outpatient treatment for a period of time before leaving the addiction treatment system. A number of studies demonstrate that this practice promotes continuation of abstinence and reduces the likelihood of arrest (e.g., Brown et al., 1994; Donovan, 1998; Gilbert, 1988; Godley et al., 2007; Higgins, Badger, and Budney, 2000; Ito and Donovan, 1986; Kosten et al., 1992; McKay, 2001; McKay et al., 1998; Moos et al., 2001; Moos and Moos, 2003; Ouimette, Moos, and Finney, 1998; Peterson et al., 1994; Ritsher et al., 2002; Ritsher, Moos, and Finney, 2002; Sannibale et al., 2003; Walker et al., 1983). Also, in one of the few economic evaluations of long-term management of chronic SUDs, French and colleagues (2000) found that while the outlay to provide a full continuum of inpatient and outpatient care was greater than that for outpatient treatment alone ($2,530 vs. $1,138; $p < 0.05$), the cost differential was offset by significantly greater reductions in societal costs over the subsequent 9 months (savings of $17,833 vs. $11,173; $p < 0.05$).

Despite the benefits associated with continuing care, a study of discharge patterns in 23 states and jurisdictions showed that although 58 percent of patients successfully completed detoxification, hospital, residential treatment, or intensive outpatient programs, only about 17 percent of these individuals proceeded to regular outpatient care (OAS, 2005). Studies focusing on single correctional, drug court, residential, intensive outpatient, and detoxification programs have found, similarly, that 25 to 90 percent of discharged individuals do not successfully access the recommended outpatient continuing care (Godley et al., 2002; Godley, Godley, and Dennis, 2001; Mark et al., 2003; McCorry et al., 2000; McKay et al., 2002; OAS, 2005; Taxman, 2002). Common reasons for low success rates in bridging patients into continuing care include relying on patients' self-motivation to follow through with discharge recommendations, discharging patients to geographically large catchment areas (particularly from criminal/juvenile jus-

tice and adolescent residential programs) where followup services are not easily accessed, and passively linking patients to other organizations or staff without proactive efforts to ensure continuity of care.

Recent studies have evaluated new and more assiduous protocols to improve participation in continuing care (Ciliska et al., 1996; Godley et al., 2002, 2007; McKay et al., 2004; Simon et al., 2004; Slesnick and Prestopnik, 2004; Zhu et al., 1996). As an example, McKay and colleagues (2004, 2005) demonstrated benefits with telephone-based continuing care. The researchers randomly assigned 359 alcohol- or cocaine-dependent adults who had completed a 4-week intensive outpatient program to one of three continuing care protocols: (a) twice weekly standard outpatient treatment for 12 weeks; (b) twice weekly relapse prevention group therapy for 12 weeks; or (c) 4 weeks of relapse prevention group therapy and 12 weeks of therapist-initiated telephone contact. Over the course of the study, the participants who were telephoned had significantly fewer positive cocaine urine tests than those in group b (odds ratio 0.80) or group a (odds ratio 0.26). The results also suggest that telephone delivery of continuing care may be most effective for persons whose SUD is less severe; participants with high dependence levels or co-occurring disorders benefited slightly less than others.

Godley and colleagues (2002, 2004, 2007) developed a protocol called assertive continuing care (ACC) and showed that it improved participation and recovery indicators. Researchers randomly assigned 183 adolescents in residential treatment to either ACC or usual continuing care (UCC). Adolescents in the ACC group worked with a case manager who tried to meet with them once before discharge. Subsequently, the case managers provided in-home outpatient treatment and helped negotiate additional treatment services, school support, probation, and other services to support recovery. All the adolescents in both intervention groups were referred to local outpatient treatment programs and self-help groups, and were given continuing care plans. Over the 90 days following discharge, those who received ACC:

- Were more likely than those given UCC to access at least some continuing care services (94 vs. 54 percent);
- Received more days of continuing care sessions (median 14.1 vs. 6.3);
- Were more likely to engage in 7 or more of 12 activities associated with sustaining abstinence (e.g., self-help, urine testing, relapse prevention work; 64 vs. 35 percent); and
- Were more likely to remain abstinent 1 to 3 months after discharge from residential treatment (43 vs. 24 percent),
- Which was, in turn, predictive of abstinence 4 to 9 months after discharge (69 vs. 19 percent).

The research team is currently exploring whether contingency contracting can further improve continuing care participation and related outcomes and whether ACC can improve outcomes following outpatient treatment.

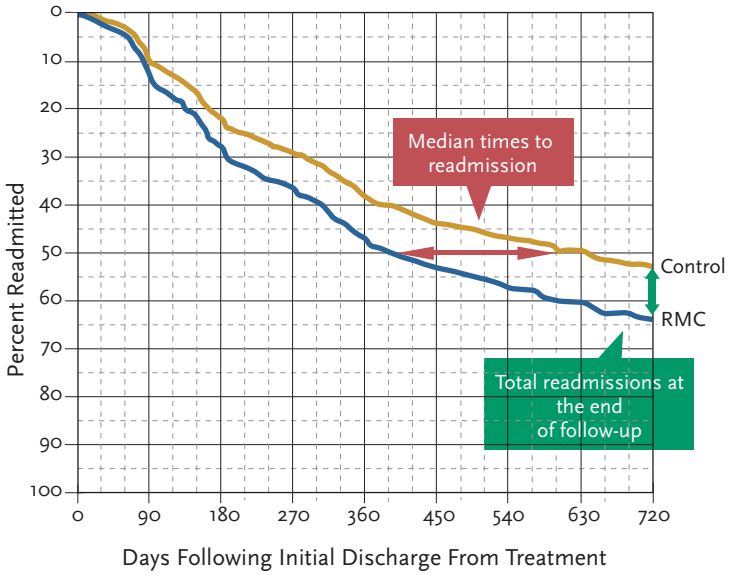
On a broader scale, various groups have suggested using performance measurement to improve continuity of care (e.g., Garnick et al., 2002; McCorry et al., 2000; McLellan et al., 2005; www.ncqa.org; www.washingtoncircle.org). One of the largest such initiatives, the Network for the Improvement of Addiction Treatment (NIATx), is a partnership among the Center for Substance Abuse Treatment, the Robert Wood Johnson Foundation, and a number of independent addiction treatment organizations (Capoccia et al., 2007; McCarty et al., 2007; Wisdom et al., 2006). The NIATx mission is to improve the efficiency with which the treatment field uses its capacity and to encourage ongoing improvements in treatment access and retention. NIATx assumes that addiction is a chronic and progressive condition and that interruptions and delays in the continuity of care can seriously exacerbate consequences. Using a process-improvement model, the first 13 NIATx programs were able to reduce the time from an individual's first contact to treatment entry by 37 percent, and from the first assessment to first treatment episode by 33 percent. They also improved the rate of returning for the second treatment session by 18 percent and the likelihood of staying four or more sessions by 11 percent (McCarty et al., 2007).

Monitoring and early reintervention have improved long-term outcomes for a range of chronic conditions.

Monitoring and Early Reintervention

Ongoing monitoring and early reintervention have improved long-term outcomes for a range of chronic conditions, including asthma, cancer, diabetes, depression, and severe mental illness (Dunbar-Jacob et al., 1995; Engel, 1977, 1980; Huber, 2005; Institute of Medicine, 2001; McLellan et al., 2005; Nicassio and Smith, 1995; Roter et al., 1998; Weisner et al., 2004). Applying this approach to SUDs, Scott and Dennis (2003) developed and tested the recovery management checkup (RMC). With RMC, treatment staff members do not rely on patients to recognize that they need help but instead conduct quarterly checkups to assess

FIGURE 3. Time to Readmission to Treatment by Condition



In the 24 months following discharge from an index episode of care, the rate of readmission was higher (64% versus 51%) and the median time to readmission was shorter (376 vs. 600 days) among patients who the received recovery management checkup intervention, compared to controls. [Adapted from Dennis, Scott, and Funk, 2003; with permission from Elsevier.]

patient status. Staff members use motivational interviewing techniques to assist those who have relapsed to resolve their ambivalence about their substance use and commit to treatment or other appropriate care. Staff members also deploy assertive treatment linkage, engagement, and retention protocols to secure patient access to treatment and increase the amount of therapy received.

The initial clinical trial of RMC randomly assigned 448 adults, when they first presented for treatment, to post-treatment followup with the checkup intervention or only quarterly monitoring (Figure 3; Dennis, Scott, and Funk, 2003; Scott, Dennis, and Foss, 2005). At the end of 2 years of followup, the results showed that patients in the RMC group:

- Returned to treatment in greater numbers (60 vs. 51 percent)
- Returned to treatment sooner (median 376 vs. 600 days)
- Attended treatment on more days (average 63 vs. 40)
- Were less likely to be in need of treatment after 2 years (34 vs. 44 percent).

A second clinical trial, with 446 patients, used a modified RMC protocol and produced parallel findings. These two trials indicate that ongoing monitoring and early reintervention can promote positive patient behaviors in long-term substance use.

Individuals with an SUD require support services to manage their condition during and between treatments.

Other Recovery Support Initiatives

Individuals with an SUD, like those with other chronic conditions, require a variety of support services to help manage their condition during and between episodes of formal treatment. Research demonstrates that active participation in self-help groups during and after treatment promotes lengthier periods of recovery (Brown, 1993; Hsieh, Hoffman, and Hollister, 1998; Humphreys and Moos, 2001; Kyrouz, Humphreys, and Loomis, 2002; McKay et al., 2002; Ritsher et al., 2002; Scott, Dennis, and Foss, 2005). Preliminary evidence also suggests that self-help participation is associated with better outcomes when patients join groups that focus on their particular issues, such as dual diagnoses (Laudet et al., 2000) or adolescent issues (Finch, 2005; Kelly and Myers, 1997; Kelly, Myers, and Brown 2002; White and Finch, 2006). Other recently tested recovery support approaches include telephone-based self-monitoring (Simpson et al., 2005) and Internet-based groups (Klaw, Huebsch, and Humphreys, 2000; Kypri et al., 2005; Toll et al., 2003). A meta-analysis of 24 studies involving 3,739 participants with chronic health conditions (other than SUDs) suggests that Internet-based interventions that allow interactions between patients and staff have a significantly higher impact than sites providing information only (Murray et al., 2004).

Connecticut and other states have begun to add recovery-based performance measures, values, and continuity of care between professional and "peer-based recovery supports" to their recovery initiatives (www.dmhas.state.ct.us/recovery.htm). Similarly, in 2003, the Arizona Department of Health Services embarked on a unique initiative designed to develop a "peer workforce" for persons with SUDs (azdhs.gov/bhs/bhsglance.pdf). Public health systems that provide addiction, mental health, child welfare, and other services in Connecticut, Arizona, and other jurisdictions target key subgroups of people with SUDs to interrupt the cycle of relapse, treatment reentry, and recovery. For example, parents with SUDs can access standardized screening, colocated services, intensive case managers, or recovery coaches to facilitate long-term treatment engagement (e.g., Loveland and Boyle, 2005; Ryan, Louderman, and Testa, 2003).

IMPLICATIONS FOR PRACTICE

Whether a program implements one of the approaches

we have described or others yet to be developed, the literature suggests that programs should take their resources and capacities into account when choosing which empirically proven efficacious programs to implement to improve care. Lipsey and colleagues (2001), in a meta-analysis, demonstrated that the thoroughness of implementation can markedly affect the efficacy of evidence-based interventions. The researchers recommended that programs implement the most efficacious program they can implement well, because a highly efficacious program will not yield any better results for patients if it is implemented poorly. Such findings have led the National Institutes of Health to emphasize the need to improve the state of "implementation science" (e.g., grants.nih.gov/grants/guide/pa-files/PAR-06-039.html). Based on a recent review of the implementation science literature, Fixsen and colleagues (2005) suggested that efforts to implement new approaches should generally include implementation strategies at multiple levels, including but not limited to Federal, state, and local stakeholders, and staff across all levels of the provider organizations.

Shifting from an acute care to a chronic care model of recovery has implications for addiction programs, as well as for external stakeholders in those programs, and proper implementation of a chronic care model is crucial to its efficacy.

Organizational Support for a Chronic Care Approach

The philosophical, financial, clinical, and practical implications of moving to a chronic care approach will touch everyone in an addiction treatment organization—its board of directors, management, clinical supervisors and line staff, administrative supports, and clients. Consider what is required, for example, to respond appropriately when a person returns for his or her fourth episode of care: intake and admission procedures must be streamlined to facilitate rapid interruption of crises or relapses; patient and staff assumptions that multiple treatments represent failure must give way to attitudes more aligned with the standards we apply to treating other chronic conditions that need long-term management; and the funding structure will need to provide the necessary financial support.

In addition, as we learn more about the factors that influence patients' progress in different phases of recovery, we will likely need greater resources and infrastructure to organize this information so that it can support real-time clinical decision making. It may be necessary to modify assessment and other record systems to transfer information readily when patients move between levels of care and to make them accessible to multiple staff on the treatment team. Addressing such issues is likely to be critical for improving the management of SUDs.

Even when staff members favor the change to a chronic care model, they may not have adequate training, education, experience, or resources to address the needs of a particular client comprehensively—ranging, for example, from making psychiatric referrals to helping with housing. Miller and colleagues (2006) suggest that programs need to equip staff with three types of infrastructure before change can happen efficiently:

- Preparatory knowledge, which may be inculcated through reading, verbal instruction, or observing competent practice by others;
- Practice with feedback—of note, early practice during or right after training without feedback can reinforce bad habits and do as much harm as good; and
- Ongoing coaching or supervision, which is essential, because practice will inevitably bring up a wide range of situations and complex scenarios not covered in the basic materials or training.

We will need additional infrastructure to organize the information we learn about the influences on recovery.

Even experienced clinicians benefit from opportunities to brainstorm with staff colleagues on ways to handle a new situation or adapt a protocol when necessary. When Miller and colleagues (2004) randomized 140 counselors to a wait list condition or four training conditions (workshop, workshop + practice feedback, workshop + coaching, workshop + feedback + coaching), all training conditions improved knowledge and proficiency, but actual practice changed only when both feedback and coaching were provided. Although this particular study focused on a specific intervention, these three components will likely be important factors when implementing many key changes necessary to move toward a chronic-care model.

Federal, State, and Local Stakeholders

Public payers, government regulators, and accrediting bodies set requirements and impose limits on what publicly funded treatment providers can accomplish in terms of adopting a chronic-care approach to treating SUDs. More than three-quarters of the people accessing addiction treatment receive some kind of public assistance (Substance Abuse and Mental Health Services Administration, 2006); this makes public fund providers the primary purchasers of services and gives them a unique

ability to reshape existing structures and policies. As one example of the constructive use of this power, McLellan (2006) recently reported preliminary data from Delaware demonstrating that offering treatment providers performance-based incentives can improve the system of care. The data showed that retention rates from 2002 to 2004 increased 30 days (48 to 69 percent) and 60 days (25 to 42 percent) after admission. The State of Massachusetts implements a continuum of care based on the chronic disease model for its prevention and treatment systems (www.mass.gov/dph/bsas/sa_strategic_plan.ppt). In an attempt to more effectively address the chronic aspects of addiction, Connecticut is reviewing and modifying its regulations, services, and training to focus more on recovery values, recovery-based performance measures, and continuity of care between professional and "peer-based recovery" supports (www.dmhas.state.ct.us/recovery.htm). Although these and other efforts across the United States are encouraging first steps in the change process, adopting a chronic-care approach will require buy-in and active participation from all concerned with reducing the health and social consequences of drug abuse and addiction.

NEXT STEPS

Recent studies suggest some initial approaches to chronic care management. However, the field would benefit from research that investigates (1) the costs of ongoing monitoring and early reintervention; (2) the chronic care model in different populations (e.g., pregnant and postpartum women, offenders leaving prison, and adolescents); (3) the point at which an individual's recovery history and status warrant transition from quarterly to biannual checkups; (4) the usefulness of more frequent or even continuous monitoring in improving outcomes; (5) the impact of less formal types of care (e.g., recovery coaches or faith-based interventions); (6) modes of service delivery such as telephone and e-mail; and (7) the indirect effects of recovery management on other outcomes such as HIV infection, illegal activity, emotional problems, vocational activity, and quality of life.

This information can help individuals and their families, and treatment staff recognize that addiction is a chronic but treatable condition, that most people with SUDs need help from several sources, that recovery often takes multiple episodes of treatment, and that relapse is common. However, staff members should encourage clients with SUDs and their families by stating that the majority of people do succeed and the likelihood of reaching recovery status is related to continuing care and ongoing recovery support. When relapse occurs, staff should explain the chronic nature of the condition, proactively refer those in relapse to continuing care and other services, and work with patients to ensure that they follow through with recommendations for continuing care, for self-help group meetings, for ongoing urine monitoring, and for services to address other problems.

CONCLUSION

Historically, addiction treatment has been conceptualized as an episodic relationship in which a person seeks treatment, receives an assessment, and then is treated and presumed cured—all in a relatively short time period. Although the field faces numerous challenges in its attempts to manage chronic SUDs more effectively, this review demonstrates that we are making progress. Indeed, it has been argued that addiction treatments appear to be as effective as interventions available for other chronic conditions such as diabetes and hypertension (McLellan et al., 2000). The growing body of empirical evidence demonstrating the chronicity of SUDs, coupled with increasing awareness among various stakeholders about the need for change, represents genuine progress. Formal and informal efforts to address the problems continue to expand; it is hoped that this enhanced awareness will lead to increased dialogue and action among the numerous stakeholders to improve the treatment and long-term management of chronic SUDs.

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