

# PRACTICE GUIDELINES FOR ADOLESCENTS WITH CO-OCCURRING SUBSTANCE USE AND PSYCHIATRIC DISORDERS

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**Practice Guidelines for Adolescents with Co-Occurring  
Substance Use and Psychiatric Disorders**

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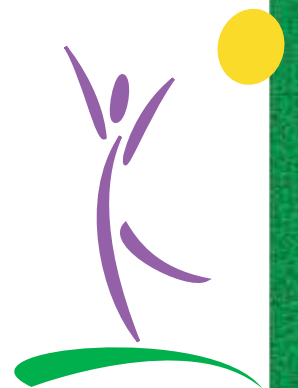
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## Practice Guidelines for Adolescents with Co-Occurring Substance Use and Psychiatric Disorders

### I. Why Do We Need Practice Guidelines?

The Division of Behavioral Health seeks to improve treatment and outcomes for adolescents with co-occurring substance use and psychiatric disorders by developing guidelines that:

- (1) define guidelines and minimum competencies for staff and programs working with this population, and,
- (2) set minimum or “best practice” standards for assessing and providing integrated treatment services to this population.

The Division of Behavioral Health contracted with several local consultants with national expertise in this area to help develop these guidelines. The guidelines were first drafted by Elizabeth Whitmore, Ph.D., Joseph Sakai, M.D., and Paula Riggs, M.D. (faculty at the University of Colorado Denver, Department of Psychiatry, Division of Substance Dependence), public comment and feedback was then given by other statewide adolescent treatment providers, with final approval by staff at the Division of Behavioral Health. Other states’ guidelines, as well as current literature, and publications by federal agencies were reviewed and incorporated into development of these guidelines.

### II. How Common Is The Problem?

#### The Overall Epidemiology of Co-occurring Disorders in Adolescents

A burgeoning of child and adolescent research in the past decade has significantly advanced the state of the science in adolescent substance use disorders and deepened our clinical understanding of effective treatment approaches (Muck et al., 2001; Drug Strategies, 2003). Developmental research has demonstrated that adolescents who present for drug treatment have a broad range of behavioral problems, skills deficits, academic difficulties, and family and mental health problems that have generally been shaped by a series of environmental adversities and biological vulnerabilities from early childhood (Hops et al., 2000; Dawes et al., 2000; Tarter, 2002; Tims et al., 2002). The high prevalence of the dual diagnosis of psychiatric and substance use disorders (SUD) is becoming increasingly recognized and documented in both the adolescent and adult literature (Crowley et al., 1998; Hills, 2007; Kandel et al., 1997; Whitmore et al., 1997).

Two large-scale population-based studies report on adolescents who have both psychiatric and substance use disorders.

1. Lewinsohn et al. (1993) reported on a large sample of 14-18-year-old adolescents with substance use disorders and found the lifetime prevalence of any psychiatric disorder to be 60%. In addition, 49% had unipolar depression, 25% had a disruptive disorder, and 16% had an anxiety disorder.
2. Similarly, the Methods for the Epidemiology of Child and Adolescent Mental Disorders (MECA) study found past-six month prevalences for comorbid psychiatric disorders with an adolescent SUD sample to be 76% for any comorbid disorder, 68% for any disruptive behavior disorder, 32% for any mood disorder, and 20% for any anxiety disorder (Kandel et al., 1997). In addition, Rohde et al. (1996) found that disruptive behavior disorders are 10 times more prevalent among adolescents with alcohol abuse/dependence than among non-drinkers.



Over the past decade, adolescents with co-occurring disorders have been more readily identified in substance treatment settings and vice versa. Compared to adolescents with substance use disorders only, those with co-occurring disorders appear to have earlier onset of substance use, use substances more frequently, and use substances over a longer period of time. They also have greater rates of family, school, and legal problems, as well as early problematic life issues (Grella et al., 2001; Hills, 2007).

In sum, *comorbidity is the rule, rather than the exception*, among adolescents in treatment for SUD. The poorer treatment outcomes, higher costs, more recidivism, and higher relapse rates associated with comorbidity may be related to poorer access to both medical and psychiatric services in comorbid youth, as evidenced by the fact that the majority of such youth in substance treatment do not receive psychiatric treatment (Grella et al., 2001; Whitmore et al., 1997; Wise et al., 2001).

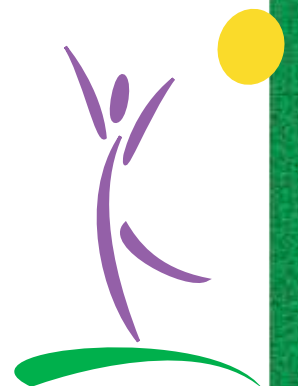
- **Disruptive Behavior Disorders**

The most common comorbid disorders associated with adolescent SUD are the disruptive behavior disorders (i.e., Oppositional Defiant Disorder (OD), Conduct Disorder (CD), Attention Deficit Hyperactivity Disorder (ADHD)), with CD being the most common (60-80%). Once CD develops, it becomes one of the most robust predictors of progression from “experimentation” with drugs and alcohol to the development of a SUD (Crowley and Riggs, 1995). Most children and adolescents who meet diagnostic criteria for CD previously met diagnostic criteria for ODD when they were younger. However, only about 50% of children with ODD progress to CD, and ODD does often not share with CD the same severe correlates and outcomes (Biederman et al., 1996). Both ODD and CD generally precede the onset of SUD, and if identified early, there is an opportunity for early intervention. Evidence-based treatment interventions have been shown to improve family functioning and reduce the risk of progression to more severe behavior problems and developing adolescent SUD. Such treatments include Parent and Family Management Training, generally with individual skills training for the child (Kazdin et al., 1992); family behavior therapy (Donohue & Azrin, 2001); Motivational Enhancement Therapy/Cognitive Behavioral Therapy (MET/CBT; Muck et al., 2001); school- and community-based interventions (Wagner et al., 1999); and multidimensional approaches (Liddle & Hogue, 2001; Henggeler et al., 1999).

The onset of ADHD is prior to age 7, and thus also precedes the development of SUD (American Psychiatric Association, 1994). Most studies indicate that ADHD, alone, does not impart a significant increase in the risk for developing SUD in adolescence unless associated with CD (Barkley et al., 1990; Mannuzza et al., 1993; Fergusson et al., 2007). However if both ADHD and CD co-occur, the risk of developing SUD in adolescence rises dramatically. As many as 30-50% of adolescents with SUD have both ADHD and CD, which not only increases the risk of adolescent SUD, but is also associated with greater impulsivity, poor academic performance and high school drop out, neuropsychological deficits, more severe substance and behavior problems, as well as worse treatment outcomes and prognosis compared to either disorder alone (Crowley and Riggs, 1995; Forehand et al., 1991; Gittelman et al., 1985; Mannuzza et al., 1993; Bussing et al., 2010).

- **Internalizing disorders**

Depressive disorders (major depression, dysthymia) occur in about 5-10% of school age children and adolescents without SUD, with prevalence rates rising to 15-30% in adolescents with SUD. These disorders may impact the severity and patterns of their substance involvement (Barkley et al., 1990; Chiles et al., 1980; Gittelman et al., 1985). Unlike some adults with chronic alcohol or drug dependence, depression in adolescents appears to be less likely to be substance-induced, and thus less likely to remit with abstinence (Bukstein et al., 1993; Riggs et al., 1995). In both epidemiologic samples and clinically referred samples, approximately half report that depression started prior to SUD and about half report that depression had onset either concurrently or after onset



of SUD (Lewinsohn et al., 2002; Riggs et al., 1995; Swendsen & Merikangas, 2002). Although there is some evidence that depression that arises in childhood increases the risk of developing adolescent SUD somewhat, it is not yet known whether treatment of depression in childhood and adolescence reduces the risk of later developing SUD.

Although less is known about the prevalence of Bipolar Disorder among adolescents with SUD, it is most likely greater than the 1% prevalence found in the general population, with prevalence estimates ranging from 3%-15% among adolescents with SUD (Wilens et al., 1999; Wise et al., 2001). There is some evidence that bipolar disorder in childhood may increase the risk of developing adolescent SUD, and that treatment may reduce this risk (Wilens et al., 1999). Adolescent onset bipolar disorder, on the other hand, dramatically increases the risk of developing a SUD (greater than 8 times the risk compared to childhood onset) (Wilens et al., 1999).

Anxiety disorders also have a higher prevalence in adolescents with SUD than found in the general pediatric population, and they may increase the risk of developing SUD (e.g., Generalized Anxiety Disorder, Social Anxiety Disorder, Post-Traumatic Stress Disorder (PTSD)) (Breslau et al. 1997; Davies et al., 2002; Lewinsohn et al., 2002; Rhode et al., 1996). Although there are data indicating that the onset of anxiety disorders may increase the risk of developing adolescent SUD (e.g., social anxiety disorder; PTSD), there is not sufficient research currently to indicate whether treatment of anxiety disorders in childhood decreases this risk.



### III. Guiding Principles for Integrated Assessment and Treatment

**The Colorado Division of Behavioral Health supports and recommends the integrated treatment and development of increased competencies in treating adolescents with co-occurring disorders.**

A large handbook published by the Center for Substance Abuse Treatment (CSAT; 2005) gives an excellent overview and detailed examination of how to provide integrated substance abuse assessment and treatment for persons with co-occurring disorders. In addition, Sciacca (2006) published a training curriculum and “best-practice” guidelines, which details several guiding principles for integrated assessment and treatment. These are recommended readings for all providers interested in increasing their proficiency in this area.

Agencies and providers are also encouraged to adopt and utilize the following Guiding Principles (drawn from Sciacca (2006), CSAT (2005), American Academy of Child and Adolescent Psychiatry (AACAP), 1997, and other literature):

- Both substance and mental health treatment settings should include screening and assessment of co-occurring disorders at the time of intake, utilizing assessments that are specific to adolescents.
- Recognition should be given to the complex, multi-problem nature of this population, and treatment should be individualized with client-centered goals to address the specific problems of the individual. These may include addressing personal, social/family, medical, legal, school, vocational, and housing issues, as well as any cognitive or functional impairment. Short, highly structured treatment sessions can be utilized to focus on practical life problems.
- Staff should have the demonstrated ability to assess the criteria for and diagnose using DSM-IV (APA, 1994) substance abuse and dependence, as well as Axis I disorders



- (especially conduct disorder, depression, anxiety, bipolar, and attention deficit hyperactivity disorders). Diagnostic/clinical evaluations should be completed to aid in formulating a comprehensive treatment plan that encompasses treatment of substance use, co-occurring psychiatric problems, as well as other problem domains.
- Staff should have an understanding of addictions (i.e., models and theories, behavioral, psychological, physical health, and social effects of psychoactive substances) and knowledge of evidence-based practices in the treatment of addiction (AACAP, 1997; Drug Strategies, 2003).
  - Once adolescents are identified as needing integrated treatment for co-occurring disorders, based on a comprehensive screening or diagnostic evaluation, a mechanism should be in place to ensure that these individuals have easy access to integrated, coordinated, and age, gender, and culturally appropriate treatment services and case management/supports.
  - Adolescents should have access to all levels of care that may be needed to address their current treatment issues. Programs should be able to provide a continuum of care to address all levels of symptom severity, recovery, and relapse prevention.
  - Abstinence should be considered to be a goal of treatment; abstinence should not be considered a requirement for initiating integrated treatment of co-occurring mental health and substance problems.
  - Programs and services should be able to “commit to the concept of one team with one plan for one person” (California Joint Policy Statement on Co-occurring Disorders, 2004) in whatever way this might work for the treatment program(s). Ideally, this should be done within a single, integrated system or treatment program.
  - Program staff, clinicians, and case managers should be cross-trained and educated to develop skills and core competencies in the treatment of co-occurring disorders, including the ability to:
    - Use non-judgmental, non-confrontational, respectful approaches (preferably motivational interviewing (Sampson et al., 2009) and motivational enhancement approaches)
    - Convey hopefulness about improvement, success in treatment, recovery, and self-efficacy
    - Express concern for the well-being of the adolescent
    - Identify and assess symptoms, diagnoses, tolerance, and withdrawal
    - Dispel stigma about treatment for mental health and substance use disorders
    - Listen to and continually assess the issues and needs of the adolescent and consider information provided by family members, significant others, and collateral providers
    - Collaboratively establish treatment goals that focus on client-centered goals and that may change as the adolescent learns new skills and develops enhanced commitment for change
    - Be persistent in engaging the adolescent and their family in treatment and being flexible enough to provide for their needs
    - Provide procedures to follow to assist families when their adolescent is in crisis or they are in need of on-call or 24/7 support
    - Recognize the limitations of their education/training and practice within their areas of expertise



- Providers should support and encourage participation in integrated treatment for co-occurring disorders, and work collaboratively among systems and services as much as possible to coordinate care/services.
- Providers should be supportive of the need for and use of pharmacological interventions/medications, if clinically indicated, for both substance and mental health treatment.
- Providers should be trained in skills and techniques that enhance motivation for treatment, and should be familiar and comfortable with a Stage of Change continuum and phased treatment/recovery model. Subsequently, treatment plans should be designed to emphasize the long-term process of internal change, and clients should be educated that these changes proceed through various stages at different points in treatment.
- Providers should use community support systems to facilitate access to treatment, or as an adjunct to treatment services.
- Empirically supported treatments and strength-based approaches should be favored and utilized whenever possible.
- Adolescent programs should utilize a family-based approach whenever possible. If family members are not available, foster parents, significant others, and peers may be included, as appropriate. Family and peer supports can be very useful in terms of sharing their experiences and history with the adolescent, as well as in providing support in the community during and following treatment. Treatment approaches that are more adolescent-focused (i.e., CBT/behavioral skills training) also show empirical support and may be one key to treatment success, even if family involvement and commitment is not optimal.
  - Comprehensive co-occurring treatment should address other contributing factors that may impact the treatment of co-occurring disorders (e.g. physical/sexual abuse/neglect, domestic violence, familial substance and mental health issues, neighborhood/community/peer factors, legal/school/vocational issues, etc.).



## IV. Integrated Screening and Assessment for Co-occurring Disorders

### Screening vs. Assessment

#### ***Screening for Co-occurring Disorders***

The purpose of using a screening instrument is to quickly assess whether the adolescent should be referred for a more comprehensive evaluation. It should be brief and should be designed to detect “red flags” issues and needs that signal the need for treatment





or immediate evaluation. A valid screening administered by staff adequately trained in administration/interpretation will ensure that any urgent needs and safety risks are identified and handled quickly. It should not, by itself, be used as a diagnostic tool. Screening may also be done to detect cognitive and social functional deficits or impairments that will make it difficult for the adolescent to participate in screening, evaluation, or treatment.

### ***Assessment of Co-occurring Disorders***

A thorough multidimensional assessment is the foundation of integrated treatment and the development of a targeted treatment plan. The initial stage of treatment should consist of a comprehensive clinical and diagnostic assessment to guide the formulation of an individualized integrated treatment plan.

**Staff performing screenings and assessments should assess for these types of deficits prior to screening, and they should have experience and be fully trained on the instruments they are using.**

Assessment is best performed when the substance use is stable, psychiatric disorders are at baseline, and some engagement is present between the adolescent and the interviewer or treatment program. In addition, assessment of current symptomatology should be done in light of current urine toxicology results and self-report of substance use.

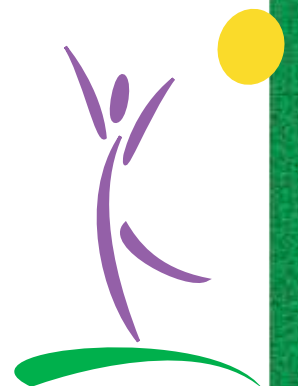
Overall, assessment should be viewed as an ongoing process where new clinical information is integrated with the base knowledge collected to that point. The goals of the assessment include:

- identification and diagnosis of DSM-IV mental and substance use disorders, and any related conditions;
- examination of psychosocial problems that may need to be part of the treatment;
- identification of motivation and readiness for treatment; evaluation of strengths and weakness of the adolescent and family,
- cultural and linguistic needs/barriers, and areas of functional impairment and skills deficits (CSAT, 2005).



In clients who are screened or identified as having depression, assessment of suicide risk (i.e., thoughts of suicide, plans, lethality and access to means/weapons, etc.) cannot be overlooked.

A comprehensive, multidimensional assessment is critical in determining the necessary level of care, service needs, and treatment approach. For example, a higher level of care (such as residential treatment) may be required for serious psychiatric disorders with dangerousness to self or others, IV drug use, need for detoxification, or pregnancy with ongoing substance use. A thorough assessment should include assessment of the following personal and family factors.



**Personal Factors**

- Current and historical substance use details, also called a Functional Analysis (i.e., “the who, when, why, where, what, and how” questions – including age of onset of each drug used regularly)
- Drugs used and frequency of use
- Context of substance use, triggers for use, and route of administration (e.g., IV drug use)
- Perceived positives and negatives of use/abstinence
- Substance abuse and dependence symptoms for each drug used regularly. These symptoms should be identified in order to make the specific abuse/dependence diagnoses.
- Current and historical mental health symptoms and psychiatric diagnostic criteria, including severity of past and current symptoms and age of onset.
- Past mental health treatment
- HIV/STD risk behaviors
- Risk of dangerousness and harm to self or others
- History of physical, emotional, sexual abuse, neglect, and trauma
- Current psychosocial stressors
- Physical health issues, current and past medications, and medication allergies
- Gender
- Sexual identity and relationships
- Legal involvement
- IQ and Academic level of functioning
- Strengths and weaknesses
- Extra-curricular activities and life skills
- Youth perception of the problem(s)
- Previous treatment experiences
- Current goals for treatment
- Motivation for Treatment/Readiness for Change

**Family, Cultural, and Neighborhood Factors**

- Family structure and functioning
- Family mental health, substance abuse/dependence and general medical history
- Developmental appropriateness, quality and consistency of parental monitoring and disciplinary practices
  - Family resources (e.g., insurance or public health coverage of any sort, transportation, housing, food)
  - Human, social services, or juvenile justice involvement
  - Cultural factors (race, ethnicity, language, religion, views and attitudes regarding mental health issues and substance problems)
  - Neighborhood and school environment
  - Peer affiliations including substance and gang involvement; prosocial and antisocial activities



### **Screening and Assessment Instruments**

The Colorado Division of Behavioral Health publishes a Colorado Alcohol and Drug Abuse Division Approved Evaluation Instrumentation For Substance Using Adolescents and Adults that include instruments to screen and assess for drug and alcohol problems, diagnostic instruments, motivation measurement instruments and placement criteria. This document has approved instruments for both adults and adolescents and can be found at <http://www.cdhs.state.co.us/ADAD/treatment.htm> under #6G.

Another detailed overview of adolescent measures is the 2008 Compendium of Evidence-based Practices for Substance Abuse Treatment. It is available at <http://www.attcnetwork.org/regcenters/productdetails.asp?prodID=306&rcID=14>. In addition, Grissom and Underwood (2003) published evidence-based recommendations for drug courts. They reviewed a range of interview and self-report measures for screening and assessment in adolescents, including those that have been used with juvenile justice populations. This review is available at <http://www.ncmhjj.com/publications/default.asp>.

Structured interviews are generally considered to be the “gold standard” for obtaining the most accurate diagnostic picture, and it is most helpful to use an instrument that covers both psychiatric and substance use disorders. Two of the most well-known and widely used examples of structured diagnostic interviews are the Global Appraisal of Individual Needs (GAIN; <http://www.chestnut.org/li/gain>); the Diagnostic Interview Schedule for Children – Revised (DISC-R; Shaffer et al., 1993).

### **Issues in Obtaining an Accurate Assessment and Diagnosis**

#### ***Symptom Interaction: How and Why Does Co-morbidity Occur?***

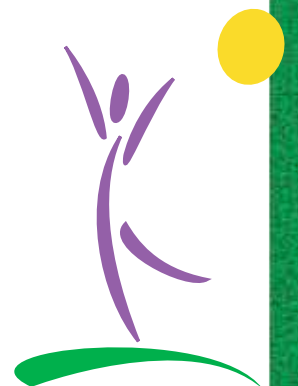
Accurate assessment and diagnosis of adolescents with co-occurring disorders is complicated by the fact that symptom patterns can overlap, mimic, or mask each other. It can also be difficult to distinguish psychiatric symptoms from those caused or exacerbated by substance use and vice versa. It is critical that the evaluator be aware of the several ways that co-occurring disorders can be manifested (Peters et al., 2008; National Institute on Drug Abuse (NIDA), 2008):

- Substance use can cause, exacerbate or otherwise contribute mental health problems (e.g., marijuana users have an increased risk of psychosis).
- Mental health disorders can increase risk or precipitate development, progression, and severity of substance use disorders (e.g., most individuals with co-occurring disorders report that mental health problems preceded substance abuse, and individuals with mental disorders may abuse drugs as a form of self-medication).
- Both substance use disorders and mental illnesses are caused by overlapping factors, such as underlying brain deficits, genetic vulnerabilities, and/or early exposure to stress, trauma, or other environmental effects (including substances) that may predispose them to later problems.

Use of a lifetime developmental timeline approach can be helpful in establishing and determining the temporal relationships between the onset and progression of mental health and substance problems, as well as determining valid diagnoses and the inter-relationships/ bi-directional influences of different disorders on each other.

#### ***The Validity of Self-Report***

The main method for screening and assessment for co-occurring disorders in this population is by utilizing self-report information, which some may question given the



nature of the population. There is considerable evidence, however, that adolescent self-reports can be valid and useful for treatment planning (Landry et al., 2003). Self-reports of recent drug use are somewhat less accurate than other self-report information, however. Information provided by adolescents is generally in agreement with other sources (e.g., peers, records), although parents may be unaware of the extent of their adolescent's drug involvement (Johnston & O'Malley, 1997; Maisto et al., 1995; Winters et al., 1991; 2000).

Validity of self-report can be enhanced if the evaluator carefully explains details and limitations related to client confidentiality, and engages them in a non-confrontational and non-judgmental manner (Winters, 2006). It is also helpful to ask the client about a specific timeframe, rather than about their usual patterns of use. Attention, concentration, comprehension of the items given, and motivation to "fake good" (i.e., active court proceedings, etc.) should also be considered along with the validity of the self-report. Use of collateral information and drug testing can help to supplement the usefulness and validity of self-report information.

### ***Self-Administered and Structured Assessments***

Written self-report and parent screening assessments may be provided to adolescents/parents prior to the first meeting or self-administered, computerized assessments can be done in the office prior to an interview to obtain a great deal of information in a short amount of time. Self-administered measures may be helpful because youth may be more likely to report symptomatology without an interviewer present. It is important, however, to ensure that the individual taking either a written or computerized assessment has an adequate reading level and computer experience (for computerized assessments). Structured diagnostic assessments may also be used and are more typically done in an interview format. Although these types of measures should not be used as the sole source of diagnostic evaluation, they can provide valuable supplementary information to providers.

### ***Assessment via Clinical Interview***

#### ***Initial Meeting with Parent(s) and the Adolescent Together***

A brief initial meeting with the parent/guardian(s) and the youth together to obtain consent for the assessment (and treatment) allows for discussion of the rules of confidentiality (child abuse, imminent dangerousness, etc.). Providers should also emphasize the importance of communication among treatment team members and describe how information will be shared among the team or between providers (if treatment is not conducted by a single provider). This meeting also allows observation of parent-child interactions and relationships. Following this joint meeting, meeting individually with the youth and the parent/guardian(s) is ideal. Valid information about current drug use and delinquent/conduct disorder behaviors is more likely to be obtained from the adolescent without their parents present, however. Communication may also occur by phone contact if the parent/guardian is not available to interview in person or to obtain information from other relevant informants (e.g., teachers, school, probation officer, case workers, etc.).

#### ***Meeting with Parent/Guardian(s)***

Parents/guardians may each provide their own observation of symptomatology from different settings and across the lifespan. Parent reporting of depressive and ADHD symptoms may also capture problems not reported by their youth (Crowley et al., 2001). Parents may have more detailed information regarding family history of substance abuse/mental illness and *in utero* exposure (i.e., maternal alcohol, tobacco or illicit substance use), pregnancy complications, and attainment of early developmental milestones. Parents/guardians also may provide relevant information regarding the home setting, level



of supervision, current problems, the family's tolerance of and attitudes about substance use, and familial/cultural views regarding mental illness. Parents may also be assessed briefly for their own current level of functioning and any need for further evaluation (i.e., substance or mental health). During a private meeting, parents also may reveal information they do not feel comfortable discussing in front of their youth.

### ***Meeting with the Adolescent Alone***

The first goal in the assessment process is to engage the adolescent and develop a therapeutic alliance. Use of an empathic, non-judgmental, culturally sensitive assessment approach using motivational enhancement techniques (Monti et al., 2001) will help to facilitate open and truthful disclosure of sensitive information. It is also very important to identify the adolescent's needs, wants, and goals.

### ***Use of Multiple Informants/Collateral Sources***

Whenever possible, the evaluation should be multidimensional with multiple informants, and providers must synthesize information from multiple sources, as well as clarify critical conflicting/discrepant information across informants. Information should be assessed from as many collateral informants as possible (e.g., parent(s), grandparent(s), siblings, other caretakers, previous and other current providers, teachers/school, counselors/staff, caseworkers, probation officers, etc.). It is especially important to assess the perception of the problem(s) from multiple viewpoints, as well as the collateral informants' goals for treatment to decide upon a common set of goals to guide treatment.

### ***Differentiation of Substance and Mental Health Problems/Symptoms***

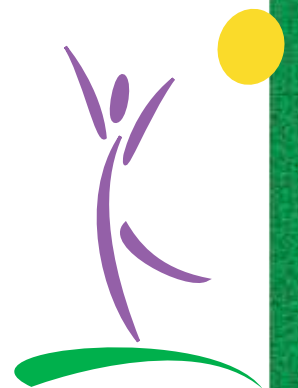
Providers should be fully knowledgeable about the disorders that are commonly comorbid with adolescent substance use disorders, including but not limited to conduct disorder, major depression, attention-deficit/hyperactivity disorder, and bipolar disorder. It can be very complicated to tease apart the causal relationships between substance use disorders (especially substance intoxication/withdrawal symptoms) and psychiatric symptomatology, and unfortunately, few assessment instruments examine the chronological relationship of both substance and mental health symptoms and disorders. Taking a comprehensive family history may be helpful in the differentiation of substance-induced and independent disorders.

Utilizing a lifetime timeline approach (i.e. longitudinally integrating developmental information, symptom onset, life stressors, substance use and current clinical presentation) can also be especially helpful in establishing the temporal relationship between mental health problems/psychiatric symptoms, substance use, psychosocial, family, academic problems and peer associations. In conducting a detailed history, special attention should be paid to:

- Onset, progression, severity and frequency of psychiatric symptoms/mental health problems
- Onset, progression, severity, and frequency of substance use
- Temporal relationships between mental health/psychiatric symptoms and periods of substance use, intoxication/withdrawal and abstinence

### ***Drug Testing***

In addition to self- and collateral-reported substance use, drug testing via urine toxicology results are an essential component of substance evaluation and treatment. Drug testing is particularly helpful in assessments to increase the likelihood of detection of substance use. It can also increase the reliability and validity of their self-reported use. Drug testing results can also be used as a means of providing rewards and consequences



in treatment. Contingencies for positive and negative tests, however, should be specified in advance of urine toxicology outcomes (Riggs & Whitmore, 1999). When used routinely, drug testing can be useful in charting progress in treatment, as well as helping to retain clients in treatment, improving compliance with treatment, and successful treatment completion. It is recommended that drug testing occur randomly and regularly, at least twice per week. Drug testing can be particularly helpful when considering the introduction of a new medication regimen, as the psychiatrist may want to know the extent of current substance use before prescribing or starting a psychotropic medication. It can also be helpful in assessing side effects to know the extent and recency of drug use via drug testing.

Vigilance by staff in utilizing specimen collection procedures, such as direct observation by a staff member, should be required to reduce risk of sample adulteration or substitution. Lab testing that can specify creatinine level can help in the detection of dilute urine samples, and creatinine/tetrahydrocannabinol (THC) ratios can be utilized over time to track changes in the quantitative levels of TCH, as it is excreted slowly by the body in heavy users (Riggs & Whitmore, 1999).

## V. A Model of Integrated Treatment

### Engagement in Treatment

The first goal of treatment is to develop a treatment alliance and engage the adolescent in treatment. Eliciting parent- and adolescent-generated treatment goals can help in understanding the adolescent and parents' treatment expectations. An empathetic non-confrontational, non-judgmental approach may help to engage adolescents and strengthen therapeutic alliance. The use of motivational interviewing techniques is particularly important in adolescents as they are generally resistant to more directive, confrontational approaches and are often ambivalent and relatively unmotivated for treatment (Sampson et al., 2009; Whitmore & Riggs, 2006). In adolescents who are referred through social services or the criminal justice system, contingencies offered by those systems may also promote treatment attendance, participation, and compliance with treatment recommendations.

It is also important to be mindful of the impact that symptoms of psychiatric comorbidity may have on initial clinical presentation and treatment motivation (e.g., cognitive distortions, tearfulness, irritability, poor concentration) (Whitmore & Riggs, 2006).

### Integration of Treatment

Although historically many providers have required sequential treatment, such as successful treatment of a substance use disorder before evaluation and treatment of a co-occurring mental health disorder, concurrent treatment is now widely recommended (NIDA, 2008). Because substance use disorders are often chronic and relapsing, and co-occurring untreated mental health disorders may impact the ability to remain substance free, a sequential treatment approach may be prone to fail. Thus, concurrent treatment offers hope for improved outcome, and it is one of the nine treatment principles endorsed by the National Institute on Drug Abuse (NIDA, 1999).

**Although integrated treatment approaches for adolescents are just beginning to be empirically tested in larger clinical trials (i.e., Riggs et al., 2008; Riggs et al., 2009), there are several empirically supported treatment approaches for substance use and conduct disorders and separately, substance use and mental health disorders.**



Having the same clinician provide therapy for substance use, conduct and other co-occurring mental health disorders is ideal and provides a seamless approach. Realistically, because of training/credentialing, separate funding streams for drug abuse and mental health treatment, and the cost of physician-conducted therapy, integration and coordination of treatment for psychiatric and substance use disorders of two or more clinicians



within the same treatment program or coordination of care between mental health and substance treatment providers is generally required (such as a clinician conducting therapy and a physician prescribing medication and overseeing mental health treatment). For example, adolescents may benefit from cognitive-behavioral therapy or other psychotherapy treatment for anxiety or mood disorders that are beyond the training/expertise of substance treatment providers and which may or may not include pharmacotherapy; such arrangements require coordination of care across providers/treating clinicians.

When multiple providers are involved, successful integration depends on regular communication of relevant information between providers/clinicians. A single physical location with multiple providers may increase the ease and likelihood of successful integration and adequate team-member communication, although integrated treatment is also possible across multiple sites with close attention to the importance of timely, thorough communication. In rural communities, it may be difficult, if not impossible to provide integrated care in one location, much less within one county or community. Local teams of providers may need to be established so that regular communication and case-sharing can occur. Particular providers may also need to be encouraged to try to develop expertise in both mental health and substance abuse treatment through extra training and on-going education.

**In addition, psychiatrists may be difficult to locate and hire in rural communities. In this case, general medical providers may be utilized (often consulting with psychiatrists at medical centers) to serve in the place of a psychiatrist, as well as conducting a search for a psychiatrist who may be willing to serve as a regular consultant for treatment providers or office-based general medical practitioners. E-therapy or telemedicine may also be an option.**

An example of efficient, effective coordinated care would be when a psychiatrist who is prescribing medication for a co-occurring psychiatric disorder for an adolescent who is concurrently receiving substance treatment from another provider/clinician receives regular calls or voicemails from the other provider. It would be beneficial for the treating psychiatrist to know about the adolescent's:

- Attendance in substance treatment; apparent side effects/response of target symptoms;
- Interactions between ongoing drug use and medication
- Apparent side effects/interactions
- Medication non-compliance or abuse
- Urine drug screening results
- Frequency and type of ongoing drug use, if not yet abstinent
- Escalation in severity or frequency of drug use
- Suicidality/danger to self/others.



The substance treatment provider/clinician would also benefit from communication with the psychiatrist regarding:

- What medications are being prescribed and for what diagnoses
- Any changes in medication/rationale
- Non-responding target symptoms
- Reformulation of diagnoses
- Consideration of medications with lower abuse potential/liability
- Information about compliance in attending scheduled medication follow-up visits and/or mental health counselor treatment /psychotherapy sessions
- Suicidality/danger to self/others.

Also, it is important to remember that coordination of care /treatment between and across providers/clinicians (psychiatrists, mental health /addictions counselors; primary care physicians) requires appropriate releases for communication of clinical and substance use information.

Integrated treatment also requires ongoing education of addictions counselors regarding the prevalence, signs/symptoms and treatments of co-occurring mental health disorders, and the importance of safety assessments and procedures for handling imminently dangerous adolescents. Conversely, mental health providers require ongoing education about the best approaches to treating substance use disorders.

### **Psychotherapy/Behavioral/Cognitive/Family Interventions for Substance Use and Comorbid Psychiatric Disorders**

Although lagging behind the studies for adults, several psychotherapies for adolescents with substance use disorders and/or co-occurring psychiatric disorders have been tested and shown to be effective, including Multisystemic Therapy (MST), Family Behavior Therapy, Individual Cognitive Problems Solving, Cognitive Behavioral Therapy (CBT) with motivational enhancement therapy (MET), Family Psychoeducation, Behavioral Family Counseling, and the Community Reinforcement Approach (Hills, 2007; Waldron & Turner, 2008). Additionally, a number of controlled studies in adults have shown that contingency management (CM) or the addition of motivational incentives significantly increase abstinence (based on negative urine drug screens) when combined with or added to other treatment modalities (Rogers et al., 2008). More recent controlled trials have similarly shown higher abstinence from marijuana and other substances in adolescents with substance use disorders with the addition of voucher incentives or prize drawings to other substance treatment modalities (Stanger et al., 2009).

The Colorado Division of Behavioral Health (formerly ADAD, November 2007) has published a compendium of approved, evidence-based or best practice approaches/curricula for substance treatment providers (that also describes many of the treatment approaches mentioned above). These can be found at: <http://www.cdhs.state.co.us/adad/PDFs/FinalCurriculumCompendiumVer2.pdf>.

Several psychotherapeutic interventions have been demonstrated as efficacious generally for commonly comorbid disorders such as depression, bipolar disorder, and several anxiety disorders. For example, bipolar disorder in adolescents may impact social, family and academic functioning, and so therapy is most successful when it focuses on each of these domains and includes efforts at reducing resistance to medication compliance, improved family functioning (e.g., communication, problem solving) (Miklowitz et al., 2008), and improved academic functioning and performance. Cognitive behavioral therapy (CBT), which has been adapted for the treatment of many mental health disorders and more targeted symptoms, has shown efficacy for adolescent depression, anxiety disorders and substance use disorders. CBT has also been shown to be effective for both adults and





adolescents with ADHD (Safren et al., 2005) and adults and adolescents with ADHD and SUD (Levin et al., 2006; 2007; Schubiner et al., 2002; Riggs et al., 2009); whereas behavioral skills training and parent training are more effective for ADHD in younger children.

Ideally, psychotherapeutic interventions targeting both SUD and comorbid disorders would be delivered by the same therapist. Practically, such treatments will often be divided between different clinicians within same treatment program or different providers and in many instances psychotherapy for comorbid disorders such as anxiety disorders may be unavailable to adolescent clients, especially those without insurance coverage. Reasonable integrated treatment may be accomplished by substance treatment programs hiring part-time psychiatrists with training in the treatment of co-occurring psychiatric and substance use disorders who can facilitate coordinated and integrated treatment within a single treatment program. They may work closely with substance treatment counselors and other program staff and attend case conference or treatment planning sessions. Such psychiatrists should also be involved in the initial diagnostic assessment and clinical evaluation of the client, along with other substance treatment clinicians/counselors, to establish diagnoses and contribute to the formulation of a comprehensive, integrated treatment plan.

### Pharmacological Principles

- When necessary, treatment of co-occurring mental health disorders should be initiated within the context of substance treatment. That treatment should include monitoring for regular therapy attendance, behavioral control, substance use (urine toxicology and self report), medication compliance and symptom severity of co-occurring mental health disorders.

Minors, OF ANY AGE, can legally consent to substance treatment in Colorado (13-22-102, C.R.S.). Individuals 15 and older can also legally consent to receive mental health services from a facility or a professional person in Colorado under 27-10-103, C.R.S. Utilizing this approach, however, requires very careful consideration.

- Pharmacotherapy may not always be indicated for co-occurring psychiatric disorders but, if clinically indicated, choice of medication should incorporate the available evidence supporting the efficacy of its use generally with adolescents and also in youth with substance use disorders.
- It is also important to consider the safety profile, abuse and diversion potential, and cost of the medication (especially if the client/family is or is likely to become uninsured).
- When possible, medication requiring only once a day dosing is preferable to multiple doses in order to increase compliance.
- It is also important to recognize the need of uninsured clients to use generic medications, whenever possible, to help control the costs associated with treatment.
- Programs should also explore the use of medications samples and patient assistance/discount drug use programs.
- Although little is known regarding the interaction between medications and drugs of abuse, clients generally need not be abstinent in order to begin pharmacotherapy; however, treatment decisions should be preceded by a careful dialogue with the client and family about the potential risks/benefits/unknowns of undertaking the medication trial



at that juncture in treatment versus the risks of waiting. Although abstinence is ideal before initiating medication for comorbidity, it is often not a realistic initial goal for adolescents. The psychiatrist and/or treatment staff should encourage and recommend reduction in substance abuse or abstinence, however, while starting a new medication.

- The importance of compliance with regular appointments for medication monitoring and evaluation of side effects, and the importance of establishing mental health and substance treatment continuing care and regular follow-up visits, should also be stressed.
- If target symptoms do not significantly improve (or if there is evidence of escalation of drug abuse or clinical deterioration) within the first two months of treatment, the efficacy of medication and the need for a change in medication should be considered, as well as re-evaluation of the diagnosis. In addition, a more intensive level of treatment may need to be considered.
- Psychopharmacology is not an exact science. Each individual may respond differently to a given medication. Prescribing practitioners should have access to peer consultation and supervision for difficult clients, clients with unique symptoms and side effects, and non-responders (Minkoff, 2000).

#### **Medication Informed Consent and Client/Family Education**

Assent for youth and consent from parents requires a dialogue between providers and the client/family about diagnosis, and sometimes diagnostic uncertainties, treatment indications, therapy options, and recommended treatment, based on factors such as availability, cost, possible side effects/complications, safety, evidence for efficacy, among other factors. It is important to provide client psychoeducation, emphasizing the importance of discontinuing or maintaining significant reductions in drug and alcohol use in order to enhance the safety and effectiveness of medication. The adolescent clients and their families should be educated about the potential

**Prescribers, clients and their families must carefully weigh the available research, the risks/benefits and unknowns prior to off-label prescribing of such medications.**

for adverse interactions between illicit drugs/alcohol and the prescribed medication, the impact and importance of abstinence/reduced substance use on medication safety/efficacy, and the importance of attendance at appointments for medication monitoring and assessment for response, side effects, and complications. Informed consent should also be viewed as an ongoing dialogue that occurs throughout treatment.

Minors, OF ANY AGE, can legally consent to substance treatment in Colorado (13-22-102, C.R.S.). Individuals 15 and older can also legally consent to receive mental health services from a facility or a professional person in Colorado under 27-10-103, C.R.S. Utilizing this approach, however, requires very careful consideration. Family involvement is often a critical treatment component. Unilateral treatment decisions may alienate those who may later be called upon to administer, monitor, or purchase medications and may undermine long-term compliance with behavioral treatment approaches and treatment team alliance with the family.

#### **Laboratory and Pediatric Assessment**

Some medications require baseline laboratory assessment, and sometimes, pediatric evaluation may help to establish safety of medication treatment among some youth (i.e. youth with family history of sudden death, medical illness that may complicate



treatment, or to rule out possible general medical illness as the source of mental health symptomatology). In rare instances, when mental health symptomatology may be moderate to severe, when no concerns about medical illness are present, and when possible consequences of untreated mental illness in the very short run raises concerns about serious deterioration or enforcement of serious consequences (i.e. youth corrections), medications might be started prior to baseline lab testing after careful discussion of the risks and potential benefits of such an approach with the adolescent and family.

Baseline height and weight should be obtained. This may be essential information, for example, in calculating dosing of ADHD medications, monitoring normative growth during treatment, or establishing that baseline height/weight are within a normative range for age and gender.

### **Medication Monitoring**

For youth characterized by impulsive decision-making, negative emotionality, poor affective regulation, and use of substances for psychogenic properties, a plan for parental monitoring of medication should be employed. Although medications with low abuse potential should be used, youth may still ignore information provided regarding abuse liability, and they may experiment with prescribed medications to see if reinforcing effects can be elicited or obtained. For medications with low therapeutic indexes, such behaviors can be dangerous. Such youth, if asked to manage their medications, may also exhibit irregular or poor medication compliance. Therefore, a plan to insure medication compliance and to limit youth access to the medication supply may be necessary. Such plans may include keeping the medication in a locked, safe location and parental or treatment program dispensing of daily medication doses. Use of weekly pillboxes may also be helpful to help the family track daily dosing of the medication(s).

### **Choice of Medication**

#### ***Substance Use Disorders***

Multiple medication treatments have been shown to be safe and effective for the treatment of alcohol (**disulfiram, naltrexone, acamprosate**), nicotine (**varenicline, nicotine replacement, bupropion**) and opioid dependence (**methadone, buprenorphine, naltrexone**) for adults. Unfortunately, unlike **buprenorphine**, which has been approved for treatment of opioid dependence among those 16 and older, most medications targeting SUD have a more limited research database to guide treatment decisions for adolescents.

#### ***Depression***

The Selective Serotonin Reuptake Inhibitors (**SSRIs**) are first line medications for treatment of depression. Although **escitalopram** recently received Food and Drug Administration (FDA) approval for treatment of adolescent depression, **fluoxetine** is also approved by the FDA for that purpose and presently has the most data supporting its use among substance abusing youth (Riggs et al., 2007). Both are appealing because of once a day dosing; fluoxetine is also available as a generic alternative. Antidepressants have been associated with increased rates of suicidality among depressed youth (FDA, 2004), and so youth starting a new medication or having a recent dose increase must be monitored for such complications. Monitoring schedules generally require assessment weekly for the first month, every two weeks for the second month, and monthly thereafter. Clinical deterioration in youth who are starting an antidepressant may have several possible etiologies, such as temporally-paired worsening psychosocial stressors or relapse to substance use, but also may indicate an emerging bipolar disorder. Many such youth present with depressive symptoms initially (Geller et al., 1998).

Although in one large recent trial, response rates for CBT alone (43%) lagged behind that of fluoxetine (61%), the combination of fluoxetine and CBT accelerated the response



(71%) and improved the response rate relative to either CBT or fluoxetine alone. Longer treatment also appeared to be more effective than shorter treatment (36 week vs. 12 weeks), **with 6-9 months of treatment being adequate for most clients** (March & Vitiello, 2009). Data from one recent randomized controlled trial of fluoxetine + CBT (focused on substance use) versus placebo + CBT for adolescents with serious SUD and major depression showed a 70% depression remission in the fluoxetine + CBT group (Riggs et al., 2007). This remission rate is very similar to results seen in depressed adolescents without SUD for combined fluoxetine/CBT. The placebo + CBT treatment group also showed a 52% remission in depression, however, strongly **suggesting that individual CBT (outpatient, weekly substance treatment) significantly contributed to depression response/remission, even without the addition of medication.**



### ***Attention Deficit Hyperactivity Disorder***

For youth with both depression and ADHD, **bupropion** has shown safety and efficacy in treating both disorders. **Atomoxetine**, an FDA approved treatment for ADHD, has shown no abuse potential, and therefore is an attractive alternative for treating ADHD, although clinical trials of safety/efficacy in adolescents with substance abusing youth are not yet available.

**Although stimulants have large treatment effects and are the first line treatment for ADHD generally, use of Schedule II medications among substance abusing youth raises concerns about potential abuse liability.**

These concerns have mostly stemmed from studies of short-acting Schedule II psychostimulants. More recent research suggests that longer acting /delayed release formulations of psychostimulant medications may have lower abuse and diversion liability compared to short acting formulations (Faraone & Wilens, 2007). Results from a recent multi-site trial in adolescents with co-occurring ADHD and SUD showed that **OROS-MPH (long acting methylphenidate with once-daily dosing) was safe and well-tolerated**, despite the fact that most participants were not abstinent. There was also a very low occurrence of medication abuse and diversion of medication in this study (Riggs et al., 2009).

**Lisdexamfetamine dimesylate** is a prodrug, requiring metabolism of the parent compound to create the active chemical. Human studies do support that higher doses produce drug liking, however, and intravenous administration produces subjective feelings of drug liking and euphoria. This medication is Schedule II, and no data is yet available to support its safety/efficacy in substance abusing youth, **so use of this medication cannot be recommended at this time for this population.** In addition, like some other prescribed stimulants, lisdexamfetamine dimesylate yields urine drug screens that are positive for amphetamines on standard urine drug toxicology tests, complicating the monitoring of illicit and diverted prescription drug use.

### ***Anxiety disorders***

Youth with SUD may come from difficult environments and are more likely to experience trauma, such as child abuse, and epidemiological studies of adults (Connolly & Bernstein, 2007) support that anxiety disorders such as social phobia, panic disorder (with or without agoraphobia) and generalized anxiety disorder are more prevalent among individuals

with alcohol and illicit drug dependence (Hasin et al., 2007; Compton et al., 2007). Limited information is available, however, to guide treatment of comorbid anxiety disorders among SUD youth. Cognitive Behavioral Therapy (CBT) targeted at anxiety symptoms has been studied in youth with anxiety disorders generally and has empirical support (Connolly & Bernstein, 2007). Although data are more limited than with adolescent depression, multiple placebo-controlled trials support the efficacy of **SSRIs** in the treatment of childhood/adolescent anxiety disorders generally (Connolly & Bernstein, 2007). When psychotherapy is not readily available, only a partial response has been seen with therapy or when symptoms are severe, impairing, or interfere with psychotherapy participation, medication treatments are recommended. Alternative medications to SSRIs may be used, but only very little empirical evidence is available for treatment guidance among SUD/CD youth with anxiety. Because of abuse potential and possible development of dependency, use of **benzodiazepines should be avoided**.

### ***Bipolar disorder (BPD)***

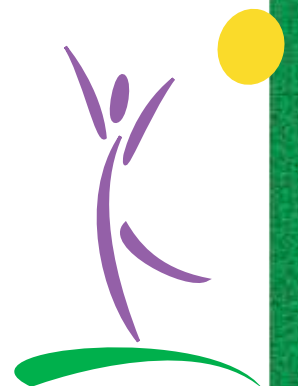
Psychiatric assessment should include evaluation for bipolar disorder. Studies of adults, utilizing structured diagnostic instruments that attempt to exclude substance-induced symptomatology, support a strong association between alcohol/illicit drug dependence and bipolar disorder (Hasin et al., 2007; Compton et al., 2007). Such work suggests that BPD is over-represented among youth with SUD, but identification of such youth is complicated by symptom overlap between reported early prodromal signs of BPD and Disruptive Behavior Disorders. Consistent with the AACAP practice parameters, the DSM-IV-TR criteria should be followed in diagnosing mania/hypomania (McClellan et al., 2007). Emotional reactivity, rageful episodes, which have been described as prodromal symptoms of bipolar disorder (Carlson & Kashani, 1988; Fergus et al., 2003), are non-specific and often exhibited by youth with Disruptive Behavior Disorders. Although empirical guidance is limited, rageful episodes that happen exclusively around limit setting, rule enforcement or disappointments, might more likely fit Disruptive Behavior Disorders, while episodic mood lability, irritability and emotional reactivity that is not as tightly linked to situational precipitants and are independent of substance intoxication and withdrawal might raise concerns about an underlying mood disorder. Family history of mood disorders, especially bipolar disorder, may also raise concerns for BPD. The timeline history also provides vital information about timing of symptoms in relation to periods of drug use/intoxication and withdrawal.

Common medication approaches for bipolar disorder include **lithium, valproic acid and atypical antipsychotic medications**. Until recently the only agent approved by the FDA for treatment of bipolar disorder among adolescents was lithium, and some data support its safety among SUD/CD youth (Geller et al., 1998), although its low therapeutic index raises some safety concerns. More recently some atypical antipsychotic medications have been approved for the treatment of adolescents mania/bipolar disorder. For all of these medications, monitoring for side effects and use of standard laboratory monitoring is essential.

### **Discontinuation of Medication**

After improvement in symptoms, some youth may discontinue their medication treatments. Careful education about the dangers of such an approach should be reviewed with the youth and family ahead of time. If the adolescent and/or family, despite education about the risks of such an approach, wish to pursue a medication-free trial, tapering should be done under close supervision from the treatment team and treating psychiatrist. Generally, it is best if tapering can occur during a low stress period, while the adolescent is not transitioning (e.g., to a new school, a lower level of treatment, or a new neighborhood), and only after a period of relative stability is achieved (i.e., abstinence from drugs, remission of symptomatology).

Although evidence regarding the needed time course for medication treatments is lacking, especially for SUD youth, some evidence is available for treatment of depression among



youth generally. Recent evidence suggests that nine (9) months of treatment for depression is associated with improved longer-term outcomes (March & Vitiello, 2009). For anxiety, because of the lack of empirical guidance, some have suggested that with stability and good medication response for 1 year, a medication-free trial should be considered (Connolly & Bernstein, 2007). For some disorders, and with an increasing number of problem recurrences, longer-term medication treatment, even lifetime treatment, may be required.

### **Safety Issues**

Youth with SUD and comorbid mental health issues are at particularly high risk for development of suicidal ideation and are more likely than adolescent controls to attempt suicide (Esposito-Smythers & Spirito, 2004). Involuntary treatment may sometimes be required, and in such instances, this may entail evaluation and a mental health hold placement by the treating psychiatrist (i.e., if available in a setting such as a day treatment program) or contacting emergency services (i.e., for mental health hold and/or transport to the emergency room). In those instances, communication between the treatment team and the emergency room staff may be essential to help the staff make well-reasoned treatment decisions. Attention to potential homicidality and duty to warn (*Tarasoff v. Regents of the University of California*, 1976), as well as the need for child abuse/neglect reporting, is also important.

For females, in particular, gender-specific issues related to their relationships with older men, sexuality, promiscuity, trauma, and potential for sexual abuse while intoxicated are critical to watch for and address when needed. Adolescent females are also likely to be involved either as a victim or a perpetrator in “mean girl” activities, such as “relational” bullying (i.e., spreading gossip or rumors and encouraging others to exclude or reject another girl), intimidation, inappropriate/embarrassing acts, etc. (Olweus, 1993). Gender-specific counseling would be helpful to address these issues as part of therapy. In mixed gender programs, special attention must be paid to client’s safety concerns, and appropriate boundaries must be established for relationships within and outside the program. Having gender-specific/matched treatment staff may also be helpful in offering level of perceived safety, especially in the early phases of treatment. Harris & Falot (2001) have developed a publication to help design trauma-informed treatment programs and systems.

Providers should pay careful attention to issues of safety throughout treatment, with careful screening at intake and throughout treatment course. Because addiction counselors and in-home therapists will generally have more frequent client/family contact than treating psychiatrists, careful education of front-line staff about the assessment of safety issues and safety planning is essential. Ideally, when safety issues arise, timely consultation with clinical supervisors and the treating psychiatrist should occur to help in the review of the safety evaluation, estimation of the imminence of safety risk, and assessment of adequacy of safety planning.

### **Ongoing Assessment**

Education of the adolescent, parents, counselors and other important informants about target symptoms may help in gathering data from multiple informants about treatment response. Close monitoring for side effects is essential, especially early in medication initiation and after dosage adjustments. Concerns about side effects may not be spontaneously presented by youth, so common side effects should be discussed prior to medication trial initiation and also screened for specifically at follow-up visits. A plan for monitoring of medication compliance is essential for determining the adequacy of a medication trial or the need for dosage adjustments. Youth with SUD may express a desire for medications that quickly alter their emotional state or quickly relieve symptoms, and they may express impatience with the time required for adequate trials of some medication types. Because of this, providers should inform adolescents and their families, prior to onset of the medication trial, of the expected timeframe for medication response and the need for a full trial to determine medication effectiveness. Several medications require ongoing/periodic lab monitoring. Clients and families should be informed during assent/consent of this schedule.



Increased substance use, behavioral dyscontrol, clinical deterioration, or lack of symptom improvement would heighten the importance of ongoing assessment, and possibly, of diagnostic reformulation. For youth who have an initial positive response to treatment but then have a subsequent decline, assessment of psychosocial stressors, environmental cues, and recent changes may be useful in averting more serious, prolonged relapses or decompensation. Clients and families should be educated that substance use may destabilize mental health disorders and that inadequately treated mental health disorders may be associated with continued substance use. However, when relapse occurs, this should be reframed not as a personal failure, but as an indication of the need for increased intensity and frequency of treatment. Such times provide an opportunity for further assessment of the antecedents to relapse and possibly new targets for treatment (e.g., relapse driven by poor stress tolerance or new negative peer affiliation).



Many youth in substance treatment respond and remit from substance using and oppositional/aggressive behaviors, but once treatment is withdrawn, they may re-engage in old behaviors. Substance use disorders have been conceptualized similarly to other chronic disorders, such as diabetes; when treatment is applied the symptoms abate, but when treatment is withdrawn they may re-occur (McLellan et al., 2000). Treatment should focus on changing the long-term environment (i.e., home and community) in ways that reflect treatment approaches with the greatest impact. Treatment should also focus on strategies to help maintain long-term structure and contingencies against

returning to substance using behaviors. Particularly for youth with multiple co morbidities, multiple substance use disorders, and unstable psychosocial supports, longer-term strategies with varying levels of treatment involvement would be ideal (Henggeler et al., 2002).

## VI. Issues of Implementation

It can be challenging to modify pre-existing treatment systems and funding streams to successfully integrate substance and co-occurring disorder treatment. The critical components include identifying interventions, guiding principles, and evidence-based practices that can be adopted by agencies and providers with fidelity to the original models. In implementing integrated care within different modalities of treatment, the following points should be considered:

- In order to achieve integrated clinical care for adolescents, agencies and providers must be able to focus on having a strong therapeutic alliance with the client and good communication between different providers, as well as natural, yet comprehensive interventions that address the global nature of the client's problems.
- Staff providing integrated care should not have pre-existing biases against concurrent/integrated treatment.
- It is important for providers to have a desire and willingness to work with youth, an appreciation of the complexities of co-occurring disorders, an openness to receiving new clinical information from other sources, an awareness of personal reactions and feelings, a recognition of limitations on one's own knowledge, and patience in working with this population and their unique needs.



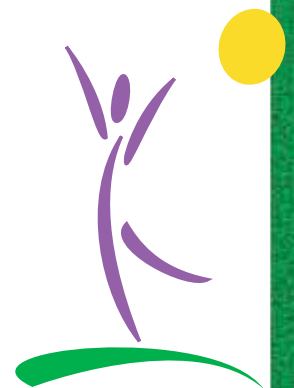
- It is especially important that addiction counselors recognize that the importance of what type of information they need to be sharing with psychiatric staff, in particular, and what types of interventions they should NOT attempt to do (i.e., giving medical or medication advice, providing a comprehensive mental health assessment or otherwise acting as a mental health counselor (if they are not), giving or changing a mental health diagnosis, assessing and handling issues related to homicidality/suicidality/dangerousness or potential medication side effects without oversight and involvement of the psychiatric treatment team, etc.) (Cline & Minkoff, 2002).
- For an agency or a provider to begin to implement integrated care, there must be strong and high-level leadership to do so, as well as a belief by all staff that this is the best approach for clients with co-occurring disorders. This may entail a great deal of training and education of staff.
- Staff must work together to develop comprehensive treatment strategies that ensure that all necessary elements for the treatment of co-occurring disorders are available under one roof, if possible. If that is not possible, a system whereby clients have seamless access to both substance and psychiatric treatment concurrently would be the next best option.
- **It is very important that clients not have to wait to receive or be successful in one type of service before they can receive the other.**
- Abstinence should **not** be a requirement before evaluation and treatment for co-occurring disorders is begun.
- Agencies, providers, and staff will have to spend time reviewing and evaluating the best types of screening, assessment, and treatment services that they can realistically provide to address all problem areas, given the constraints of their service system, funding, and licensing requirements/restrictions.
- The wider the variety of treatment providers that can be included, the more comprehensive the overall knowledge base and clinical skills that will be available within the agency/provider.
- A review of policies and procedures, as well as documentation and record-keeping, billing procedures, and referral mechanisms will also need to be done to ensure that any systemic barriers to providing integrated treatment are addressed.
- Finally, as agencies begin to adopt integrated treatment, additional training, supervision and quality assurance procedures will need to be put into place to handle the changes that will be needed within the agency/provider/facility and system. Regular continuing education opportunities should be provided to keep up to date on issues related to integrated treatment, as this is a rapidly developing field.





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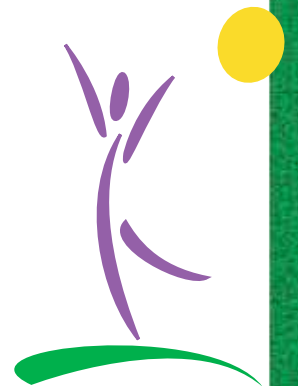
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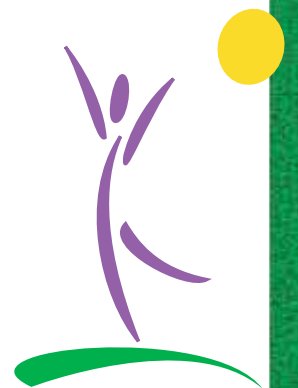


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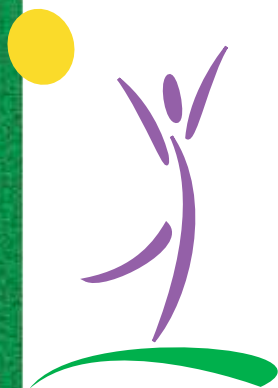


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