Expected Outcomes in Substance Use Disorder (SUD) Treatment for Youth

Adolescent Substance Use is a Major Public Health Concern
According to the National Center of Addiction and Substance Abuse (1, p. 5), substance use is the primary public health issue facing adolescents today and contributes “to the three leading causes of death among adolescents—accidents, homicides and suicides.” The effect of substance use on society is estimated to cost $468 billion dollars per year (2), with the cost of adolescent drinking alone estimated to cost the United States $69 billion dollars (1).

The National Institute on Drug Abuse (NIDA) (3, p. 4) lists the following potential serious social and health risks from repeated substance use by adolescents:

- school failure
- problems with family and other relationships
- loss of interest in age appropriate, healthy activities
- impaired memory
- increased risk of contracting an infectious disease (like HIV or hepatitis C) via risky sexual behavior or sharing contaminated injection equipment
- mental health problems - including substance use disorders of varying severity
- death by overdose

Substance Abuse Treatment Works
The good news is that promising and evidenced-based treatments for adolescent substance use disorders demonstrate positive outcomes in reducing substance use in adolescents (4, 5, and 6). Further, these treatment gains are sustained over time (4). However, while we know treatment works, only 10.8% of youth needing treatment for alcohol or drug abuse received it (7). Accessibility and linkage to substance use treatment at the earliest juncture is critical and leads to better long term outcomes including a shorter period of time to achieve lifetime abstinence (8).
Sustained Abstinence Is Difficult to Achieve and Relapse Is Common

While there are significant improvements during treatment which are maintained post treatment, the majority of youth still have episodes of substance use relapse following treatment (9). Research is clear that substance use is a chronic relapsing disorder (10). Williams and Chang (6) found that the average rate of sustained abstinence after treatment, across 53 adolescent substance use treatment outcome studies, was 38% at 6 months and 32% at 12 months. The percentage of youth in recovery (defined as no substance use problems in the past 30 days) at the 12 month follow up in the Cannabis Youth Treatment Study ranged from 17 to 34% (4). The important message is that communities must understand the chronic relapsing nature of substance use disorders and have realistic expectations about sustained abstinence over time.

Co-occurring Mental Health and Substance Use Disorders

Comorbidity negatively impacts youths’ substance use treatment outcomes, regardless of length of stay (11), amount of treatment (12), or whether the youth received an empirically supported substance use treatment (13). Rowe et al. (13) concluded that “comorbidity poses significant challenges regardless of intervention approach,” p. 137. It is common, in fact for youth with substance use and co-occurring disorders to need multiple treatment attempts and supportive environments to sustain recovery (12, 13, 14). In addition, there are higher rates of treatment dropout and poorer long-term success rates in both adolescent and adult populations with co-occurring disorders (15). Intervention research indicates that treating one mental health or substance use disorder in isolation is not sufficient (16).

Factors that lead to positive outcomes for youth with co-occurring substance use disorders include: (14, 17, and 18).

- Prosocial peers and activities
- Sober family recovery environment
- Nurturing family relationships with positive communication
- Positive adults and recovery mentors outside of the family
- Intensive monitoring and supervision
- Vocational activity
- School connectedness and commitment

Factors that lead to poor substance use outcomes and relapse for youth with co-occurring substance use disorders include: (5, 14, 17, and 18).

- Family or peer substance use
- High family conflict
- Low parental supervision and monitoring
- Low commitment to school
- Favorable attitudes toward substance use (youth, parents)
- Involvement in illegal activity
- Victimization
- Substance dependency
- Earlier initiation into drug use
- Co-occurring mental health disorders and severity of psychiatric symptoms
- Being male
- Alcohol use and related problems

Treatment program components that lead to positive outcomes for youth with co-occurring substance use disorders: (4, 5, 19, and 20)

- Family therapy-based programs
- Programs with:
  - strong engagement that promote program completion
Expected Investment Outcomes in Substance Use Disorder (SUD) Treatment for Youth

- continuing care
- Programs that:
  - incorporate motivational interviewing and cognitive behavioral therapies
  - match treatments based on substance use screening and assessment
- Comprehensive, integrated treatment approaches
- Developmentally appropriate treatment
- Quality assurance processes to ensure protocol adherence, fidelity, and project implementation
- Clinical coaching and consultation; proactive supervision
- Working with the highest severity subgroup

Measuring Outcomes for Youth with Co-occurring Disorders: What is measured to show effectiveness?
Focus should be on integrated outcomes. The multiple impacts of substance use; both substance use and mental health outcomes; and risk reduction per life domain (see list below) should be measured; and the trajectory of reduced risk and use over time should be targeted.

- Individual: Mental health and substance use symptom reduction (outcome tools)
  - Substance Use: Drug screens/reported substance use in last 30 days
  - Risk behaviors: Reduction in risk behaviors (e.g. runaway etc.)
  - Mental health symptomatology: Number of hospitalizations;
- Family: Level of family conflict; family substance use; quality of family relationships; monitoring and supervision; if youth remains in home and community at end of treatment
- School: In school and passing; no new suspensions or expulsions; days truant
- Community: No new court charges (Probation violations; misdemeanors; felonies)
- Peers/Social: Prosocial peers and activities
- Retention (i.e. stays engaged in services and attends/ participates)

Examples of instruments that can be used to measure adolescent substance abuse outcomes:

**Substance Abuse Assessment Instruments:**
Teen Addiction Severity Index (T-ASI; 21)

Global Assessment of Individual Needs (GAIN, 22)
http://www.gaincc.org/

Comprehensive Adolescent Severity Index (23)

Practical Adolescent Dual Diagnostic Interview (PADDI; 24)
http://www.evinceassessment.com/product_paddi.html

**Mental Health Instruments with Substance Use Domains:**
Child and Adolescent Functioning Assessment Scale (CAFAS; 25)

Child and Adolescent Needs and Strengths (CANS; 26)
http://www.praedfoundation.org/About%20the%20CANS.html

**Juvenile Justice**
The Massachusetts Youth Screening Instrument-Version 2 (MAYSI II; 27)
References

1. The National Center of Addiction and Substance Abuse at Columbiana University (June, 2011). Adolescent Substance Use: America’s #1 Public Health Problem.


The Technical Assistance Network for Children’s Behavioral Health


