

# Conrad N. Hilton Foundation

## **Program Strategy for Substance Abuse**

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# Executive Summary

*In November 2011, the board of directors of the Conrad N. Hilton Foundation reaffirmed the importance of substance abuse as a priority for Foundation grantmaking and requested that Foundation staff develop a strategy for achieving measurable impact in this area. In August 2012, the board of directors approved the strategy for the next five years.*

*This briefing outlines a strategy informed by substantial input from content experts and practitioners in the field.*

**THE CHALLENGE: Substance abuse has a high cost for individuals and society. This chronic condition affects people of all ages but has its origins in adolescence.**

In recent years, the health field's understanding of substance abuse has evolved from that of a moral or social failure to a public health issue that recognizes substance use disorders as preventable and treatable chronic conditions. Substance use disorders pose high costs to individuals and society: they are a leading cause of preventable death and disability, a key contributing factor to all leading causes of teen death, a cause of violent and risky behaviors, and a barrier to successful academic performance and career advancement. Moreover, although large sums are spent on enforcing drug laws and treating serious addictions, public and philanthropic funding for early interventions that can prevent substance abuse is extremely limited.

**ADDRESSING THE CHALLENGE: As the single largest private U.S. funder in the substance abuse field, the Conrad N. Hilton Foundation can lead an effort to promote advances that have demonstrated a significant impact on reducing substance abuse.**

The Hilton Foundation's proposed annual funding commitment of \$10 million establishes the Foundation as the leader among U.S. foundations. The Robert Wood Johnson Foundation has invested over \$1 billion on this issue since 1972 but has since changed its focus and reduced its funding in this field. Open Society Institute is the next largest funder at \$7 million per year and is eager to coordinate with the Hilton Foundation's work. Research has highlighted an effective approach to substance abuse prevention through early intervention that is not yet in wide practice. The Foundation will champion this new approach, leverage substantial private and public funding, increase awareness, and spread adoption of this approach through key institutions such as health care providers, schools, and community organizations.

## **THE APPROVED STRATEGY:**

- 1. By focusing on youth, the Foundation will intervene at a critical point in the development of addictive behavior.**

**Substance abuse affects people of all ages, but has its origins in youth—a time when the brain is less developed and use patterns are especially risky.** The human brain, especially the areas that support decision making and impulse control, is not fully developed until age 25.<sup>1</sup> This makes youth more vulnerable to engaging in risky behaviors, including experimenting with

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<sup>1</sup> California Society of Addiction Medicine (2009). "Blueprint for Adolescent Drug and Alcohol Treatment in California."

drugs. When the use of addictive substances is initiated in adolescence, the risk of addiction is magnified.<sup>2</sup> The chances of developing an addiction are nearly seven times higher for teens who begin using before age 15 than for those who delay use until age 21 or older, and 96 percent of adults with substance disorders began use before age 20. Thus, youth's tendency to engage in high-risk behaviors underscores the importance of delaying the onset of use, identifying risky behaviors, and intervening early to address misuse and deter addiction. Due to youth's vulnerability and the potential lifetime consequences of substance abuse, the Foundation has narrowed its strategic focus to improving substance abuse prevention outcomes for youth by means of early intervention.

**2. There is substantial evidence that one approach, Screening, Brief Intervention, and Referral to Treatment (SBIRT), provides a cost-effective way to deter early users from developing dependency or addiction. Although the evidence base is strong, awareness and practice of SBIRT among health care providers, schools, and community groups is still very limited.**

Identifying youth substance use or risky behaviors and intervening early are critical to prevent escalation into more severe use and addiction. Increasingly, experts acknowledge that prevention and treatment are not two disjointed worlds; they overlap in a continuum of care. Early intervention models bridge prevention and treatment and provide a cost-effective approach to preventing and addressing substance abuse by breaking the cycle of addiction before it develops while reaching a large number of youth.

Screening, Brief Intervention, and Referral to Treatment (SBIRT) is considered the most effective form of early intervention; it provides a cost-effective and tailored approach to identifying and addressing youth substance use early. Studies have identified as much as a \$4 cost savings in treatment for every \$1 spent on SBIRT.

There is a broad base of evidence to support the effectiveness of SBIRT for alcohol use in the population over age 18. While the evidence base is still emerging for SBIRT among younger populations, early studies are promising and have driven major national organizations, including the Substance Abuse and Mental Health Services Administration (SAMHSA) and the American Association of Pediatrics to endorse the use of SBIRT for youth. However, SBIRT is rarely taught in medical or nursing schools, and its practice is largely limited to clinical settings that reach only a small percentage of the nation's youth.

**3. The Foundation will support efforts to spread the adoption of SBIRT among health care providers, schools, and community groups to reach far larger numbers of youth and prevent them from developing chronic substance abuse disorders.**

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<sup>2</sup> Benowitz, N.L. (2010). Nicotine addiction. *New England Journal of Medicine*, 362, 2295-2303.  
Chambers, R. A., Taylor, J.R. & Potenza, M.N. (2003). Developmental neurocircuitry of motivation in adolescence: A critical period of addiction vulnerability. *American Journal of Psychiatry*, 160(6), 1041-1052.  
Crews, F., He, J., & Hodge, C. (2007). Adolescent cortical development: A critical period of vulnerability for addiction. *Pharmacology, Biochemistry and Behavior*, 86(2), 189-199.  
Guerri, C. & Pascual, M. (2010). Mechanisms involved in the neurotoxic, cognitive, and neurobehavioral effects of alcohol consumption during adolescence. *Alcohol*, 44(1), 15-26.  
Van Leijenhorst, L. Moore, B.G. Op de Macks, Z. A., Rombouts, S. A. R. B., Westenberg, P. M., & Crone, E.A. (2010). Adolescent risky decision-making; Neurocognitive development of reward and control regions. *NeuroImage*, 14(5), 325-335.

Through grantmaking, convening, research, and advocacy, the Foundation will play a national leadership role among public, nonprofit, and private sector partners in strengthening and expanding early intervention services through a four-pronged approach:

- A. The Foundation will work to create opportunities for health care providers—the key stakeholders that need to be involved in identifying risky behaviors and delivering early intervention services—to gain the knowledge and skills to detect and address youth substance use and abuse before risky behaviors escalate.
- B. The Foundation will expand access to SBIRT through increased funding and broader adoption in non-clinical settings (e.g., schools).
- C. The Foundation will strengthen the evidence base for the cost-effectiveness of SBIRT among youth in a range of settings and across multiple substances.
- D. In keeping with the Foundation’s core values, the strategy will seek opportunities to support the needs of youth particularly at risk for substance abuse and will also reserve some funds for experimentation to learn by supporting emerging innovations in the field.

**Through this strategy, the Foundation will support efforts to reinforce positive behaviors and detect and address youth substance use and abuse early, providing a path to healthy living.**

<b>Vision</b>	<i>Youth substance use and abuse are detected and addressed early, which provides a path toward healthy living</i>
<b>Initiative Areas</b>	<ol style="list-style-type: none"> <li>1. Increase health care providers’ knowledge and skills to detect and address youth substance abuse early before risky behaviors escalate</li> <li>2. Expand access to, increase public and private funding for, and strengthen implementation of early intervention services for youth</li> <li>3. Strengthen the evidence base and foster learning in the field to improve early intervention practice for youth</li> </ol>
<b>5-year Goals</b>	<p><u>Increased Knowledge and Skills of SBIRT Among Health Care Providers Serving Youth</u></p> <ul style="list-style-type: none"> <li>• Increase by 30,000 the number of pediatricians who have training and are aware of SBIRT’s importance</li> </ul> <p><u>Improved Access and Implementation of SBIRT Services for Youth</u></p> <ul style="list-style-type: none"> <li>• At least 30 percent of U.S. youth age 15-22 have comprehensive SBIRT access</li> </ul> <p><u>Strengthened Evidence Base and Fostered Learning</u></p> <ul style="list-style-type: none"> <li>• Increase knowledge regarding SBIRT’s effectiveness</li> </ul>
<b>Ultimate Result</b>	<i>Youth live healthy lives free of substance abuse, based on prevention and early intervention programs and systems</i>

## *In a Nutshell*

**Problem:** Substance abuse remains a huge problem for youth, with little investment by the philanthropic sector; however, promising evidence-based interventions can make a significant difference.

**What:** The Conrad N. Hilton Foundation will lead an effort to prevent and address youth substance use and abuse early (ages 15-22).

**How:** Foundation efforts will expand the adoption of Screening, Brief Intervention, and Referral to Treatment (SBIRT), an evidence-based best practice for early intervention, which is not yet widely available to youth across the country.

**With Whom:** The Foundation will partner with national medical associations, medical educators, advocacy organizations, technical assistance providers, and research institutions to adopt and embed SBIRT access into medical practice, expanding SBIRT's reach for youth.

# Strategy Overview

## Commitment to Addressing Substance Abuse

Since its establishment in 1944, the Conrad N. Hilton Foundation has endeavored to address the needs of the world's most vulnerable populations. The Foundation currently conducts strategic initiatives in six priority areas: preventing substance abuse, providing safe water, ending chronic homelessness, supporting children affected by HIV/AIDS, improving outcomes for youth transitioning out of foster care, and extending Conrad Hilton's support for the work of Catholic Sisters.

In the area of substance abuse prevention, the Foundation has invested close to \$70 million over the past 30 years, most of which has gone to developing and disseminating Project ALERT, a substance abuse prevention curriculum for middle school students. Additionally, the Foundation has supported select organizations implementing programs and conducting research in substance abuse. Going forward, the Foundation has reshaped its strategic focus to increase the impact of its efforts in this important area.

The Hilton Foundation's identification of youth substance abuse prevention as a strategic focus and its forthcoming increase in funding provide an opportunity for a substantial impact. Core to the Hilton Foundation's grantmaking approach are long-term commitment and leverage, both of which are key components of the new strategic approach. A focus on early detection and intervention for youth substance abuse will leverage funding that supports related programs. Expanding access to high-quality, efficient early intervention services; disseminating technical knowledge and skills among practitioners; and fostering learning on this topic will enable improvement in youth substance abuse outcomes.

## Strategy Development Process

Based on interests expressed by the Foundation's board at its 2008 retreat, the Foundation engaged FSG to research and understand the issue of substance abuse and guide the development of a strategic approach for achieving large-scale, sustainable change. In November 2011, the board of directors reaffirmed substance abuse as a strategic initiative area and instructed the staff to refine the Foundation's strategy to achieve measurable outcomes. This work included the following:

- *Landscape Assessment*: outlining the size and scope of the problem, needs, funding landscape, and current efforts based on research and data analysis, including:
  - *Stakeholder Interviews*: compiling the perspectives of over 60 national experts, practitioners, government representatives, and other funders on how to best improve substance abuse outcomes for youth
  - *Convening*: engaging a broad range of stakeholders working across the substance abuse field at both the community and national levels in small and large group discussions with Foundation staff and the FSG team. The discussions supported the Foundation's vision to prioritize prevention and early intervention outcomes for youth and presented perspectives on particular challenges and opportunities

- *Focus Groups*: conducting two focus groups—one with youth affected by substance abuse and another with their parents—to gain a better understanding of the experience of those affected by this issue and a fuller view of the problem and interventions
- *Site visit*: touring an early intervention pilot and interviewing researchers, practitioners, and students to learn about innovative early intervention models
- *Strategy Development*: synthesizing the above information to identify strategic opportunities for the Foundation’s engagement in substance abuse

## Scope of the Current Problem

### The Understanding of Substance Abuse Has Evolved

In recent years, field experts’ understanding of substance abuse has evolved from that of a moral or social failure to a public health issue that recognizes substance use disorders as preventable and treatable chronic conditions. In the 1980s, substance abuse was regarded as a moral failure leading to crime and community disintegration. With this view, the emphasis of the field was placed on prevention and limiting availability of substances through law enforcement. In the 1990s, the perception of substance abuse shifted away from that of a moral failure, to that of a social behavior deeply rooted in complex cultural norms and habits with associated health risks. The field responded by addressing substance abuse-related behaviors mainly through environmental and individual interventions. By the late 1990s, a new paradigm emerged within the scientific community that acknowledged substance abuse as a health issue involving a preventable and treatable chronic condition. While the public’s perception of substance abuse has not kept pace with this paradigm shift, the field’s leaders now emphasize preventing and intervening early as key to addressing substance abuse as a health issue.<sup>3</sup>

**Addressing substance abuse is of the utmost importance due to its high cost for individuals and society.** For individuals, substance abuse is a cause of violent and risky behaviors, a barrier to successful academic performance and career advancement, and a key contributing factor to all leading causes of death among teens. Youth substance abuse increases the risk of poor physical health, disease, and damage to the brain. In the United States, substance abuse is the leading cause of preventable death and disability. Federal and state governments spend significantly more on the consequences of substance abuse and addiction than they do on prevention and treatment.

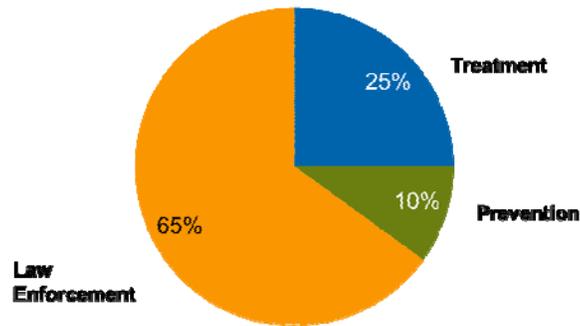
### Funding to Address Substance Abuse Is Limited, Particularly for Prevention

The federal government allocated \$15 billion to substance abuse funding in 2011. However, 65 percent of federal funding was directed toward law enforcement, rather than the prevention and treatment services that are necessary to address the underlying public health issue. Only 25 percent was focused on treatment and 10 percent on prevention. State funding varies widely in the amount spent on substance abuse programs and in the portion of that funding coming from state versus federal sources. For example, over 40 percent of the California budget (\$631 million in 2011) was federally funded, whereas roughly 20 percent of Minnesota’s budget (\$120 million in 2011) was federally funded.

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<sup>3</sup> Capoccia, VA, (2006), “The Evolution of the Robert Wood Johnson Foundation’s Approach to Alcohol and Drug Addiction.” The Robert Wood Johnson Foundation Anthology: To Improve Health and Healthcare, Volume IX.

### Public Federal Funding (\$15 Billion, 2011)<sup>4</sup>



National philanthropic funders spend about \$100 million annually on substance abuse—a small percentage compared with public expenditures.<sup>5</sup> Projected investment in substance abuse over the next five years will make the Hilton Foundation the largest national philanthropic funder in the substance abuse field. While there are few national philanthropic funders, there are many smaller local funders (e.g., health and community foundations) that provide an opportunity for partnering and leveraging additional funds. Of the national philanthropic funders, The Robert Wood Johnson Foundation (RWJF) was the largest and played a key leadership role, investing over \$1 billion to address substance abuse since 1972. However, as a result of a change in priorities in 2005, RWJF exited its proactive investment in this field.

Apart from the Hilton Foundation, Open Society Institute (OSI) is the largest national strategic substance abuse funder, investing approximately \$7 million a year.<sup>6</sup> OSI is primarily focused on closing the addiction treatment gap, to assure that those in need of addiction treatment can access it. By advocating for increased public funding for treatment, fostering insurance reform to include substance abuse as a medical condition, broadening insurance coverage, and improving program efficiency, OSI is a substantial contributor to improving addiction treatment. **However, with few philanthropic funders in the field, and limited focus on prevention from both public and private funders, there is a scarcity of national investment in substance abuse prevention and early intervention.**

<sup>4</sup> Office of National Drug Control Policy, (2011), National Drug Control Strategy: Budget Summary.

<sup>5</sup> *Foundation Center Database*, (2011).

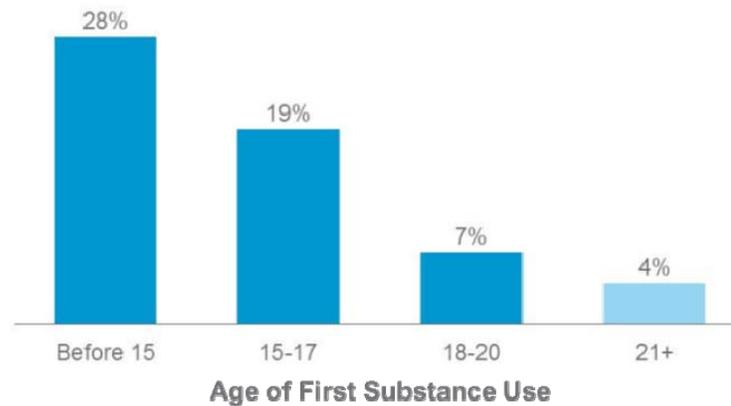
<sup>6</sup> *Ibid.*

## Substance Abuse Has Its Origins in Youth, Where Use Patterns Are Especially Risky

Brain development science shows that the human brain, including the areas that support decision making and impulse control, is not fully developed until age 25.<sup>7</sup> This makes youth more vulnerable to engaging in risky behaviors, including experimenting with drugs. When the use of addictive substances is initiated in adolescence, the risk of addiction is magnified.<sup>8</sup>

- A majority (63 percent) of the 23 million Americans with an alcohol and/or drug addiction are over the age of 25. However, the chances of developing an addiction are nearly seven times higher for people who begin using before age 15 than for those who delay use until age 21 or older. For example, 28 percent of Americans who started to use addictive substances before age 15 developed a substance use disorder within their lifetime, whereas only 4 percent of those who started using after age 21 developed a disorder.<sup>9</sup>
- When compared with adults, teenagers and young adults tend to have more risky and potentially harmful use patterns, using less frequently but more intensely.<sup>10</sup>

**Likelihood of Developing a Substance Use Disorder by Age of First Use<sup>11</sup>**



<sup>7</sup> California Society of Addiction Medicine (2009). "Blueprint for Adolescent Drug and Alcohol Treatment in California."

<sup>8</sup> Benowitz, N.L. (2010). Nicotine addiction. *New England Journal of Medicine*, 362, 2295-2303.

Chambers, R. A., Taylor, J.R. & Potenza, M.N. (2003). Developmental neurocircuitry of motivation in adolescence: A critical period of addiction vulnerability. *American Journal of Psychiatry*, 160(6), 1041-1052.

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Mechanisms involved in the neurotoxic, cognitive, and neurobehavioral effects of alcohol consumption during adolescence. *Alcohol*, 44(1), 15-26. Van Leijenhorst, L. Moore, B.G. Op de Macks, Z. A., Rombouts, S. A. R. B.,

Westenberg, P. M., & Crone, E.A. (2010). Adolescent risky decision-making; Neurocognitive development of reward and control regions. *NeuroImage*, 14(5), 325-335.

<sup>9</sup> National Center on Addiction and Substance Abuse at Columbia University, The, (2011), "Adolescent Substance Abuse: America's #1 Health Problem."

<sup>10</sup> Crews, F. T., & Boettiger, C. A. (2009). Impulsivity, frontal lobes and risks for addiction. *Pharmacology, Biochemistry and Behavior*, 93(3), 237-247.

National Center on Addiction and Substance Abuse at Columbia University, The (2011). "Adolescent Substance Abuse: America's #1 Health Problem."

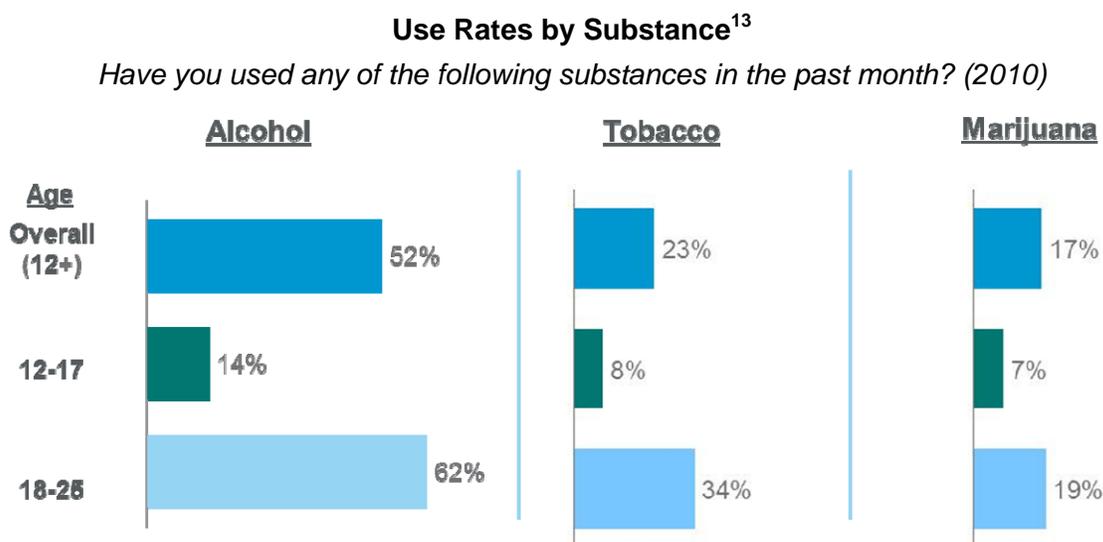
Riggs, N. R., & Greenberg, M. T. (2009). Neurocognition as a moderator and mediator in adolescent substance misuse prevention. *American Journal of Drug and Alcohol Abuse*, 35(4), 209-213.

<sup>11</sup> National Center on Addiction and Substance Abuse at Columbia University, The, (2011), "Adolescent Substance Abuse: America's #1 Health Problem."

**Youth is the critical period to prevent substance use disorders.** Addiction develops more easily in the adolescent brain because it is still developing. This vulnerability is compounded the earlier use begins. Thus, youth’s tendency to engage in high-risk behaviors underscores the importance of delaying the onset of use, and identifying risky behaviors and intervening early.

Youth’s vulnerability to addiction makes current youth substance abuse trends concerning. While long-term use trends show that overall substance use is declining, substance abuse patterns among youth remains a major public health concern.

The addictive substances most widely used by youth are alcohol, tobacco, and marijuana. While use trends vary over time as certain substances fall in and out of popularity, alcohol, tobacco, and marijuana have remained the most widely used addictive substances among youth and adults in the past decades. In 2010, over half of Americans over age 12 (approximately 132 million) consumed alcohol, 23 percent consumed tobacco, and 17 percent used marijuana in the previous 30 days.<sup>12</sup>



With regard to **alcohol**, concerning trends emerge when users’ age and intensity of use are analyzed.

- Fourteen percent of adolescents age 12-17 (an age range highly vulnerable to developing a substance use disorder) report having consumed alcohol in the past month.
- Alcohol misuse rates (measured by past thirty days use) reveal that nearly one quarter (21.3 percent) of Americans age 12 or older participated in binge drinking. Among 12<sup>th</sup> graders, one-third binge drink.<sup>14</sup>

<sup>12</sup> U.S. Department of Health and Human Service, (2010), National Survey on Drug Use and Health.

<sup>13</sup> Ibid.

<sup>14</sup> Binge drinking is defined as consuming five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least one day in the past 30 days. National Center on Addiction and Substance Abuse at Columbia University, (2011), “Adolescent Substance Abuse: America’s #1 Health Problem.”

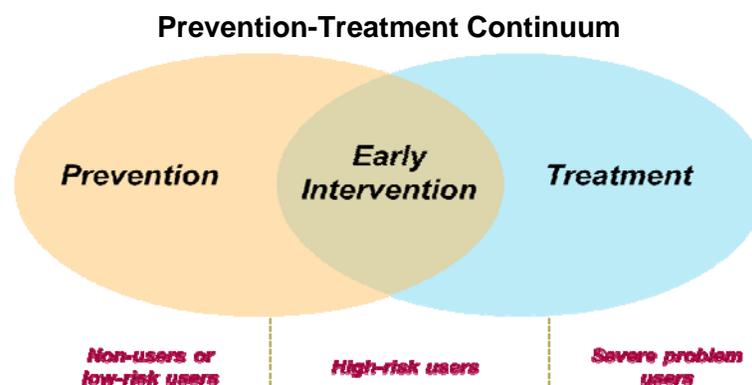
**Illegal drug use** is also a source of concern. **Marijuana** is the most commonly used illegal drug (17 percent of Americans age 12 or older). Despite potency of marijuana more than doubling since the mid-1990s (the mean THC potency has increased from 4.56 percent in 1996 to 11.75 percent in 2008),<sup>15</sup> Americans' perception of the risks involved in marijuana use has decreased, leading to increasing use rates.

The severity of **non-medical prescription drug use** has also raised concerns nationwide; prescription drug misuse, which is considered illegal, is the second most abused category of illegal drugs.<sup>16</sup> Youth rates of non-medical prescription drug use have been fairly stable in recent years, but trends in initiation (youth who use prescription drugs as their first illegal drug), dependency rates, and treatment rates indicate a growing problem. In 2010, past-month non-medical prescription drug use among youth age 12-17 was 3 percent, and among young adults age 18-25 was 6 percent.<sup>17</sup>

**While teenagers have the lowest use rates across substances, they are at the most risk of developing substance use disorders that they carry on into adulthood. It is because of this vulnerability and the potential lifetime consequences of substance abuse that the Foundation has identified youth as the focus of its substance abuse work. More specifically, the Foundation will focus on ages 15-22 to support youth in this critical transition period marked by high school, higher education, and/or incorporation into the workforce.**

### **Early Intervention for Youth Is Essential to Prevent and Address Substance Abuse**

Increasingly, experts acknowledge that prevention and treatment are not two disjointed worlds; they overlap in a continuum of care. Prevention focuses on non-users and low-risk users. Early intervention primarily focuses on high-risk users but has been shown to have some primary prevention benefits by reinforcing the positive behavior of the non-users and low-risk users who are screened. Treatment focuses on severe problem users. Early intervention models bridge prevention and treatment and provide a cost-effective approach to preventing and addressing substance abuse. While treatment is an important piece to address the needs of youth with severe problems, early intervention breaks the cycle of addiction before it develops while reaching a larger number of youth. **At its November 2011 meeting, the board encouraged the staff to deepen its research on opportunities for the Foundation to improve prevention and early intervention outcomes for youth.**



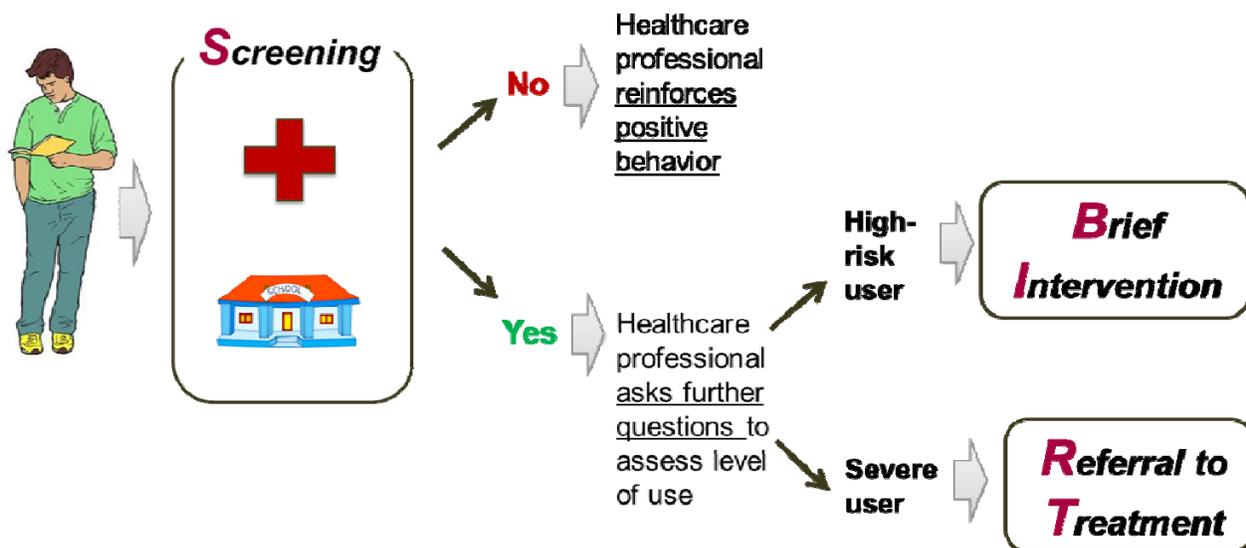
<sup>15</sup> Burgdorf, JR, et al., (2010), "Heterogeneity in the composition of marijuana seized in California." Elsevier.

<sup>16</sup> White House, The, (2011), "Epidemic: Responding to America's Prescription Drug Abuse Crisis."

<sup>17</sup> U.S. Department of Health and Human Service, (2010), National Survey on Drug Use and Health.

## Early Intervention Prevents the Escalation of Risky Behaviors

Most communities currently lack the mechanisms to identify risky substance users early and provide a cost-effective intervention before more harmful consequences develop. Screening, Brief Intervention, and Referral to Treatment (SBIRT) is the most widely tested and used early intervention model. Early intervention can be implemented in a wide range of settings. It is most commonly employed in primary care and emergency departments. However, innovative models are expanding implementation to settings such as schools and exploring the use of electronic screening tools, such as online questionnaires. Questionnaires can be emailed to a patient by a health care provider in advance of an office visit, be administered on a computer at patient intake, or be openly available on websites about substance abuse.



To illustrate the SBIRT model, the figure above shows a youth encountering SBIRT in a health care setting such as his primary care physician's office or at his school. First, this youth would be asked a series of screening questions to determine his level of risk. If he is abstaining from using, he would receive positive reinforcement and education on the risks of substance use. If he displays a mid- to high-risk profile, he would be given a brief intervention, ranging from a motivational conversation to a multi-day workshop. If he displays a severe abuse problem, he would be referred to an addiction treatment provider.

## Early Intervention Offers a Cost-Effective Approach to Improve Substance Abuse Outcomes at Scale

Strengthening and expanding early intervention for youth offers a focused, targeted approach to addressing youth substance abuse that can have a large-scale impact on deterring addiction and supporting youth on a path to healthy lives. Through early intervention efforts, the Foundation hopes to achieve significant impact by working through existing institutions that touch youth, such as hospitals, pediatricians' offices, and schools. Because efforts to support the strengthening of services are embedded into these existing systems, they are also more sustainable and scalable.

Given the lack of national players in the field and the systemic nature of this work, the Foundation plans to focus on early intervention for national impact. The Foundation will leverage funding from a broad range of sources including substance abuse prevention funding streams, but also funding available for addiction treatment, health system strengthening, and other risky youth behavior prevention efforts.

There is strong evidence for the effectiveness of SBIRT with adults' alcohol and drug use across a variety of settings. For example, a SAMHSA-funded study in San Diego found that after six years (involving 280,000 screenings by nine emergency departments and trauma units, one burn unit, and one community health center), 74 percent of patients who screened positive for substance use disorders reduced their use; of those patients identified as "at-risk," "high-risk," or "severe-risk," 62 percent stopped drug use and 60 percent reduced alcohol consumption to low-risk levels.<sup>18</sup>

- There is a broad base of evidence proving SBIRT's effectiveness with alcohol. Numerous studies have proven that SBIRT delivered to adults in primary care and emergency department settings decreased alcohol use, morbidity, mortality, repeat injury, hospitalizations, drinking and driving, and associated costs.<sup>19</sup>
- Though a clear evidence base for illicit drugs needs further development, research has shown a decrease in frequency of illicit drug use, alcohol use, and alcohol intoxication at the six month follow up.<sup>20</sup>
- There is a broad base of support for early intervention implementation in a variety of settings. The World Health Organization has an expanded international program to study implementation of SBIRT integration into primary care health systems.
- The evidence thus far indicates that SBIRT services provide a cost-effective approach to addressing substance abuse through the lens of preventive health. When SBIRT is implemented in the primary care setting, studies suggest a \$4 cost savings for every \$1 spent on SBIRT.<sup>21</sup> This not only implies greater incentives for SBIRT to be adopted for long-term cost savings, it also demonstrates the importance of addiction avoidance for mitigating other health-related issues associated with substance abuse. SBIRT offers the detection and intervention necessary to support healthy individuals and avoid substance abuse related costs.

The evidence base around the effectiveness of SBIRT with youth is promising.<sup>22</sup> Retrospective reviews combining the results of many studies on youth SBIRT reveal the effectiveness of motivational interviewing (a modality of brief intervention) for youth substance abuse behavior. The evidence is strong enough that the American Pediatric Association has included SBIRT into its guidelines. Additionally, the Substance Abuse Mental Health Services Administration (SAMHSA) recently

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<sup>18</sup> Bower, Susan. "Screening, Brief Intervention and Referral to Treatment: The San Diego Experience." County of San Diego Health and Human Services Agency.

<sup>19</sup> McCance-Katz, E, (SARC Conference, 2011), "Integration Screening, Brief Intervention, and Referral for Treatment into Every Clinical Practice Setting." UCSF.

<sup>20</sup> Ibid.

<sup>21</sup> Gentilello, L. M., Donovan, D. M., Dunn, C. W., Rivara, F. P. (1999). Alcohol interventions in a trauma center as a means of reducing the risk of injury recurrence. *Annals of Surgery*, 230, 1–18.

<sup>22</sup> Examples of studies demonstrating SBIRT effectiveness for youth include: Knight, John R., et al., (2012), "Computer-Facilitated Substance Use Screening and Brief Advice for Teens in Primary Care: An International Trial." *Journal of the American Academy of Pediatrics*. Walton, MA et al., (2010), "Effects of a brief intervention for reducing violence and alcohol misuse among adolescents: a randomized controlled trial." University of Michigan., Jensen, CD et al., (2011), "Effectiveness of motivational interviewing interventions for adolescent substance use behavior change: a meta-analytic review." University of Kansas., Tripodi, SJ, et al., (2010), "Interventions for reducing adolescent alcohol abuse: a meta-analytic review." Florida State University., Clark, DB, et al., (2010), "Screening and brief intervention for underage drinkers." University of Pittsburgh School of Medicine.

published an SBIRT adolescent screening manual, which demonstrates its belief in the impact of the intervention. Moreover, SAMHSA is investing in the expansion of SBIRT implementation through implementation and evaluation grants to states and medical residency training programs.

## Opportunity for Impact

### The Foundation Will Play a National Leadership Role Expanding and Strengthening Prevention through Early Intervention

Expanding access to early intervention and strengthening the quality of services offer a systemic approach for the Foundation to address risky behaviors and prevent harmful consequences. Early intervention reinforces the positive behaviors of non-users or low-risk users, identifies youth who are engaging in high-risk behaviors (a large, vulnerable population), and provides a cost-effective brief intervention. Early intervention also provides a mechanism for identifying youth with severe use problems and referring them to treatment.

Despite the potential benefits, there is limited availability of early intervention services for youth. National attention is shifting towards preventive medicine, and large national leaders are supporting SBIRT. Given this momentum, along with a need for philanthropic leadership in the field, the Hilton Foundation will partner with leading public and private organizations to be a leader in expanding early intervention for youth. The Foundation will focus on the critical transition periods between the ages of 15 and 22, marked by the transition from middle school to high school, higher education, and/or incorporation into the workforce.

The Foundation will seize three opportunities to foster the national expansion of early intervention services for youth:

- 1 Increase skills and knowledge of SBIRT among health care providers serving youth.** Currently, health care providers—the key stakeholders that need to be involved in detecting risky behaviors and delivering early intervention services—have limited awareness and knowledge about how best to address youth substance use.
- 2 Improve access and implementation of SBIRT services for youth.** Obstacles to access, financing, and delivery hinder the ability of health care providers to implement early intervention services and align and coordinate SBIRT services with other systems.
- 3 Strengthen the evidence base and foster learning.** While there is a strong evidence base supporting the effectiveness of early intervention in decreasing risky behaviors among adults, there is a need to strengthen and further disseminate the evidence base for youth, including implementation in multiple settings and across multiple substances.

### **1 Increasing Skills and Knowledge of SBIRT Among Health Care Providers Serving Youth**

National expansion of early intervention will require increased awareness among health care providers about the important role they play in detecting and addressing youth substance abuse, as well as increased knowledge about how to deliver SBIRT services. Currently, health care providers have

limited opportunities to learn about SBIRT, which limits their ability to identify and address risky substance abuse behaviors among youth. Early intervention services can be implemented by a variety of professionals (e.g., pediatricians, nurses, mental health professionals, and social workers), which indicates that a wide range of knowledge and awareness efforts are needed. Moreover, these efforts must reach both practicing professionals as well as those in training.

The Foundation will play a role in increasing skills and knowledge among health care providers by promoting SBIRT education for health care professionals in training and in practice across various disciplines (e.g., primary care with an emphasis on pediatrics, nursing, social work, clinical psychology, psychiatry, physician assistants, and behavioral health).

Opportunities to **increase knowledge and awareness among health care providers in training:**

- Developing SBIRT courses and embedding them in medical school curricula
- Including SBIRT questions in the United States Medical Licensing Examination as an incentive for medical schools to teach an SBIRT curriculum
- Incorporating SBIRT training in medical residency programs
- Developing SBIRT standards in health professions education accrediting agencies

Opportunities to **increase knowledge and awareness among practicing providers:**

- Advocating for health care professional associations (e.g., American Association of Pediatrics) to issue SBIRT policy statements and SBIRT practice guidelines
- Increasing continuing medical education (CME) requirements in a wide range of formats for practicing professionals to learn about SBIRT
- Building a community of practice for SBIRT among health care provider networks

## Improving Access and Implementation of SBIRT Services for Youth

Supporting the implementation of SBIRT services is another essential component of strengthening and expanding SBIRT for youth. While there are growing efforts to implement early intervention services for youth in medical, school, and other settings, delivery models with proven effectiveness that can be replicated at a national scale are limited.

Currently, the majority of SBIRT services are provided in emergency rooms, trauma centers, and to some extent, primary care settings, to a population that is mostly over age 18. Growing efforts to reach more youth in more settings (e.g., school, online) are hindered by access, financing, and delivery challenges:

- Youth's infrequent contact with medical settings, compounded by the relatively small number of medical providers offering SBIRT services for youth, highlights the need to expand youth access to early intervention in medical and non-medical settings
- Limited available funding for the initial set up costs and insufficient public and private reimbursement for SBIRT services underscore the need to expand available funding for set up costs and reimbursement
- Providers are challenged to implement effective delivery models that overcome practical barriers—such as staffing, workflow, systems, and involvement and education of parents while providing a confidential environment for youth—and coordinate with the treatment community to ensure continuity of care

The Hilton Foundation will play a key role in the national implementation of SBIRT for youth by expanding access, increasing funding streams, and strengthening delivery systems.

### Opportunities to expand access:

- Supporting efforts to expand SBIRT to a variety of settings (e.g., piloting school-based SBIRT models)
- Advocating for inclusion of SBIRT services with the accreditation requirements of medical settings (e.g., the Joint Commission guidelines for hospital accreditation) and performance measures
- Supporting the development of early intervention electronic tools and processes

### Opportunities to leverage the Foundation's funding and build adequate funding streams:

- Advocating for designated Single State Agencies for substance abuse services to use prevention block grants to fund early intervention services for youth
- Advocating for private insurers to adopt SBIRT reimbursement for cost savings and to encourage their provider networks to implement it
- Advocating for increased activation of SBIRT reimbursement codes across states
- Collaborating with and leveraging funding from other health care and youth development-focused funders

#### **. Opportunities to strengthen delivery models:**

- Providing technical assistance to implement SBIRT, including dissemination of effective tools and approaches, such as electronic screening in primary care settings
- Supporting efforts to embed SBIRT within a broader behavioral health care approach, including broad-based screening and shared billing codes, which would support confidentiality of service provision

### **3 Strengthening the Evidence Base and Fostering Learning**

Strengthening the evidence base for youth SBIRT and fostering learning through dissemination and convening is another key component to supporting the expansion of SBIRT nationally. As previously outlined, a limited but promising evidence base supporting youth SBIRT exists and is backed by a stronger adult research base. While youth-specific SBIRT tools have been developed (e.g., CRAFFT<sup>23</sup>), additional efforts are needed to build a solid SBIRT toolkit for youth.

As a philanthropic leader, the Foundation will contribute to building a stronger evidence base for youth SBIRT and disseminating new and existing evidence among providers, key influencers, and policy makers. These efforts will ultimately result in greater adoption and will attract more partners and funding.

#### **Opportunities to strengthen the evidence base and foster learning:**

- Funding innovative research efforts to expand access to SBIRT in multiple settings, such as pilots of youth SBIRT in schools and online SBIRT tools, as well as finding effective models to embed SBIRT in daily practice
- Advocating for increased funding to strengthen the evidence base for youth SBIRT through larger, more traditional research, such as clinical trials and longitudinal studies

#### **Other Opportunities**

In pursuing each of the above described opportunities for impact, the Foundation will seek to build synergies with its current foster youth work as opportunities arise. Foster youth is a population that is particularly vulnerable to substance abuse. Substance use disorders have consistently been found to be higher among youth in child welfare than the general population—34 percent of foster youth use illegal drugs compared to 22 percent of youth who had never been in foster care. Youth who are transitioning out of foster care are especially vulnerable to substance abuse, and this demographic is the target of the Foundation’s current efforts to support transition-age youth.<sup>24</sup> Potential approaches to supporting this population include leveraging Hilton’s current efforts to support foster youth to embed SBIRT services with the child welfare system.

Additionally, the Foundation values innovation as a key means to creating meaningful social change. Therefore, the Foundation will keep a door open for innovative and promising new ways to prevent substance abuse among youth.

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<sup>23</sup> CRAFFT is one example of a youth-oriented SBIRT tool; it is a mnemonic acronym of first letters of key words in the six questions that healthcare professions use to screen youth for risky substance use related behaviors. Center for Adolescent Substance Abuse Research, The Children’s Hospital Boston.

<sup>24</sup> Narendor S., McMillen J., (2009), “Substance Use and Substance Use Disorders as Foster Youth Transition to Adulthood.”

## Approved Strategy

Building on this research, the Hilton Foundation board of directors has approved a strategy to maximize the Foundation's impact on substance abuse.

Staff designed the strategy based upon five design principles articulated and endorsed by the board:

### Design Principles:

1. Achieve significant and measurable impact
2. Support a large and vulnerable population
3. Drive long-term, systemic change
4. Align with other Hilton Foundation initiatives
5. Leverage public and private funds and partnerships

Based upon this guidance from the board, the staff developed a vision, three key initiative areas, and targeted outcomes.

**Vision:** *Youth substance use and abuse are detected and addressed early, which provides a path toward healthy living*

### Three Initiative Areas:

1. **Increase health care providers' knowledge and skills to detect and address youth substance abuse early before risky behaviors escalate.** Supporting effective education programs for health care professionals, as well as the inclusion of early intervention requirements in certifications, accreditations, and standards will increase knowledge and awareness of youth early intervention among health care providers. Through programs that target health care practitioners and those in training, providers will understand their role in addressing substance abuse and have the tools to address youth use. Moreover, early intervention services to youth will be strengthened in quality and expanded in reach. Partners in this work will include medical schools, accrediting organizations, and health professional associations.
2. **Expand access to, increase funding for, and strengthen implementation of early intervention services for youth.** Investing in the development and expansion of effective and efficient early intervention models for youth will help identify and scale effective delivery models. Advocating for increased and sustained funding will address current funding gaps for implementation and reimbursement of youth SBIRT. Increased funding and a greater number of effective delivery models will lead to broader implementation, availability, and access of early intervention services for youth. Partners in this work will include technical assistance providers, advocacy organizations, and nonprofits working with parental engagement and education.

3. **Strengthen the evidence base and foster learning in the field to improve early intervention practice for youth.** Supporting the creation of new learning and disseminating new and existing knowledge among providers, policy makers, and funders will strengthen the evidence base for youth early intervention. Evaluation will measure the impact of and identify findings from Hilton Foundation grants to inform the Foundation's work and share learning with the field. Strengthening the evidence base and sharing findings will attract partners and additional funding for youth early intervention. Partners for this work will include research institutions and advocacy organizations.

With the anticipated levels of strategic grantmaking and non-grantmaking investment, the Foundation will work toward the following goals:

### **5-Year Goals**

#### Increased Knowledge and Skills of SBIRT Among Health Care Providers Serving Youth

- Increase by 30,000 the number of pediatricians who have training and are aware of SBIRT's importance

#### Improved Implementation of SBIRT Services for Youth

- At least 30 percent of U.S. youth age 15-22 have comprehensive SBIRT access Foundation leverages \$10M in private funding for SBIRT implementation and research

#### Strengthened Evidence Base and Fostered Learning

- Increase knowledge regarding SBIRT's effectiveness

**Ultimate Result:** Youth live healthy lives free of substance abuse, based on prevention and early intervention programs and systems

**Appendix 1: Organizations Interviewed by FSG.**

*Does not include additional organizations consulted by the Hilton Foundation.*

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**Adolescent Substance Abuse Program Children’s Hospital**

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**Alcohol and Drug Services, County of San Diego Health & Human Services Agency**

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**American Legacy Foundation**

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**American Society for Addiction Medicine**

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**Avalon Carver Community Center**

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**Betty Ford Center Children’s Program and Training Academy**

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**BEST Foundation; Project Alert**

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**CA Department of Alcohol and Drug Programs**

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**Center for Educational Research and Development, Berkeley**

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**Centers for Medicare and Medicaid Services**

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**Coalition for a Drug Free Greater Cincinnati**

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**Coalition for Whole Health/ Legal Action Center**

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**Community Anti-Drug Coalitions of America (CADCA)**

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**Communities Against Substance Abuse in San Diego**

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**Community Catalyst**

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**Community Coalition in South LA**

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**Drug Strategies**

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**Faces and Voices of Recovery**

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**Franklin County Communities that Care**

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**Harvard Medical School**

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**Illinois Department of Human Services, Bureau of Substance Abuse Prevention**

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**Join Together**

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**Kate B. Reynolds Charitable Trust**

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**LA County Public Health, Substance Abuse Prevention and Control**

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**Legal Action Center**

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**Minnesota Department of Human Services**

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**National Center on Addiction and Substance Abuse (CASA)**

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**National Council for Community Behavioral Healthcare**

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**National Institutes of Health (NIH)**

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**National Institute on Drug Abuse (NIDA)**

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**NYC Prevention Resource Center**

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**New York State Office of Alcoholism and Substance Abuse Services  
Prevention Bureau**

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**NIATx**

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**NORC at the University of Chicago**

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**Office of Behavioral Health Prevention Services, Louisiana**

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**Open Society Institute (OSI)**

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**Orange County Behavioral Healthcare and Chair**

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**Pacific Institute for Research and Evaluation (PIRE)**

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**Penn Center for Substance Abuse Solutions**

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**Phoenix House**

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**PROSPER - Partnerships in Prevention Science Institute**

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**RAND Corporation**

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**Robert Wood Johnson Foundation**

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**Sangre De Cristo Community Health Partnership**

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**Society for Adolescent Health and Medicine**

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**Stanford School of Medicine**

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**State Department of Behavioral Health and Developmental Disabilities, Division of Addictive Diseases**

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**Substance Abuse and Mental Health Services Administration – Center for Substance Abuse Treatment (SAMHSA/CSAT)**

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**Substance Abuse and Mental Health Services Administration - Office of Policy, Planning & Innovation (SAMHSA/OPPI)**

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**The Health Foundation of Greater Cincinnati**

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**The Partnership at Drugfree.org**

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**UCLA Integrated Substance Abuse Programs**

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**University of Pittsburgh**

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**Vista Hill Bridges Early Intervention and Treatment Programs**

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**White House Office of National Drug Control Policy (ONDCP)**

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## **Appendix 3: Key Terms**

### **Addiction**

- A primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social, and spiritual manifestations reflected in pathologically pursuing reward and / or relief by substance use and other behaviors

### **Early Intervention**

- Public health approach to screening, identifying / detecting risky behaviors early, evaluating, providing a brief intervention and / or treating individuals with substance abuse disorders as needed

### **Prevention**

- Prevention of substance use; ranging from delaying onset of substance use to decreasing use
- Prevention of risky use / behaviors and substance abuse by individuals

### **Risky Behaviors**

- Substance use-related cognitive, motor, and behavioral impairment that is manifest by passing out, memory loss, engaging in risky sexual, and other behaviors (e.g., violence, accidents) with legal, social, employment, educational, and other consequences
- Can be classified as low, high, or severe risk

### **Substance Abuse**

- Consumption of alcohol or tobacco by minors
- Misuse / overuse of alcohol, tobacco, or non-medical use of prescription or over-the-counter drugs
- Use of a substance in a manner that deviates from the culturally acceptable norms and leads to adverse consequences

### **Substance Use**

- Consumption of alcohol, tobacco, or illegal substances

### **Substance Use Disorder**

- Complex behavioral disorder characterized by preoccupation with obtaining alcohol or other drugs and a narrowing of the behavioral repertoire towards excessive consumption and loss of control over consumption
- Usually also accompanied by the development of tolerance and withdrawal and impairment in social and occupational functioning.

### **Systemic Approach**

- Approach that seeks to drive sustainable change by transforming the way in which existing systems (e.g., health systems, youth development systems) perform their work, coordinate amongst each other, and/or are funded

## **Youth**

- For the purpose of substance abuse, youth / adolescents are defined as individuals between the ages of 12 and 25, at which point the brain is fully developed and is less vulnerable to addiction. This same age bracket is sometimes divided into adolescents (12-17) and young adults (18-25)