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PAVING THE WAY TO CHANGE

Advancing quality interventions for adolescents who use, abuse or are dependent upon alcohol and other drugs.

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THIS WORK WAS MADE POSSIBLE THROUGH THE GENEROUS SUPPORT OF *The Bridge Foundation*

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INTRODUCTION

Adolescence is a developmental period of growth and great potential, but it is also a time of risk-taking and experimentation including the use of alcohol and other drugs (AOD). While AOD use is a normative behavior among American teenagers, and in many ways a rite of passage to adulthood, not all youth emerge from experimentation unharmed. Currently there are 1.7 million youth in this country struggling with a diagnosable substance use disorder (SUD)[1]. At no other time in an individual's development are the stakes of drug experimentation so high: adolescence is the at risk period for developing a substance use disorder [2-7]. And unfortunately, the number of teenagers choosing to experiment is on the rise. The most recent 5-year AOD use trends among teens have shown increases in current and past year substance use [8, 9]. In fact, in 2011 there were 3 million new initiators of substance use; of these, 55% or more than 1.65 million were adolescents [1, 10, 11].

The increasing incidence and prevalence of substance use among American adolescents is distressing as youth are 5 times more likely to develop a substance use disorder compared to adults [12, 13]. This disease can (and frequently does) follow them for life. More than 90% of adults suffering from addiction developed the problem between the ages of 12-20 years [14]. This is a particularly poignant and under-recognized statistic with great prevention and intervention implications. It bears repeating that only about 10% of substance dependence cases occur after adolescence. Thus, successful efforts to prevent, delay, or minimize substance use during adolescence will clearly be the most economical and most enduring way to reduce the many public health, safety, and economical threats associated with AOD abuse and dependence.

There is a price to pay for not providing effective preventive care or for not intervening early — an inevitable increase in the need for addiction treatment and an inescapable solidification of a pipeline to adult treatment services. Today, the number of youth in need of varying levels of treatment is staggering. Yet, in many ways, the American substance abuse treatment system for adolescents is antiquated as it has not kept pace with numerous scientific advances. Scientific evidence clearly indicates the need to identify and treat this disease (or its pre-disease state) as early as possible, and the need to treat the full expression of the disease within a chronic medical condition model [15, 16]. Despite this knowledge, the treatment (and reimbursement) of adolescent substance abuse is based upon an acute care model that is not effective for treating this chronic illness [17]. Like other chronic illnesses with social, biological and environmental determinants, substance use disorders are best addressed with a full continuum of care including wellness and prevention, early intervention, treatment, continuing care and supportive services. Unfortunately, the currently used approaches to wellness and prevention and early intervention are largely inadequate. The availability and quality of adolescent treatment is insufficient. And continuing care is basically non-existent.

The time is now to significantly change our national approach to adolescent (and young adult) substance abuse. In the text that follows you will see that research has already charted the way for better, more efficient adolescent prevention, intervention, treatment and continuing care. The evidence is clear that adolescent substance use can be prevented; abuse can be identified and reduced; and dependence can be effectively treated. Through coordinated and targeted efforts, we can create important and sustained changes in the way care is delivered to adolescents (and emerging adults) and significantly narrow (and at some point potentially eliminate) the pipeline to adult substance abuse treatment services.

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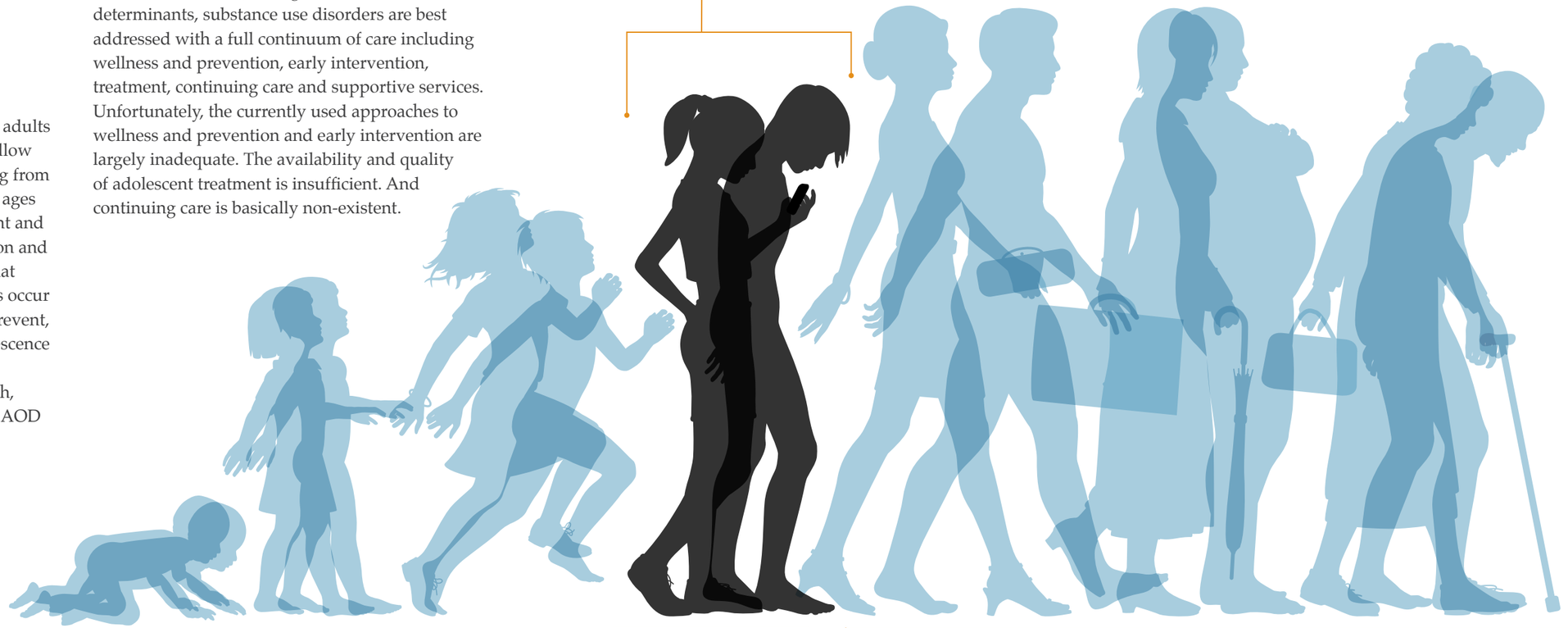


BACKGROUND

THE IMPACT OF HEALTH REFORM AND PARITY LEGISLATION ON SUBSTANCE USE DISORDERS

Why the Time is Now to Change our Approach to Adolescent Substance Abuse Care

For far too long, substance use and mental health disorders have been segregated from the rest of healthcare, at a policy and programmatic level. This segregation has resulted in consistently underfunded programs and a national approach that has been plagued by stigma. Individuals suffering from substance use disorders have not had access to continuous quality care, and families have had very little recourse in demanding improved coverage for their loved ones.

It is important to repeat and emphasize that 90% of substance use disorders begin between the ages of 12-20 years [14]. In practical terms, this means that intervention efforts can reasonably be concentrated to the years between 12 and 20 with the goals of reducing substance use-related health and social problems and preventing the diagnosis of addiction. These are eminently achievable goals that are valuable to society. As you will read, there are now a number of research-derived, effective and practical interventions that can reduce not only the rates of addiction but also the more prevalent rates of substance use-related car accidents, unwanted pregnancies, infectious diseases and school drop-out.

The good news is that now, like no other time in our history, we have the chance to change the way in which substance use disorders are perceived and managed. The passage and implementation of Healthcare Reform and Parity legislation make it possible to finally integrate substance use and mental health disorders into the rest of healthcare, to ensure that these illnesses are cared for at par with other medical disorders, and to improve outcomes for patients and society.

Healthcare Reform and Substance Use Disorders

The longstanding segregation of substance use disorders from the rest of healthcare is scheduled to change by the end of 2015 with the implementation of the Affordable Care Act (ACA). The legislation requires providers and insurers to implement and cover the full range of prevention, early intervention and care management services for substance use disorders in virtually all healthcare organizations. In addition, the Mental Health Parity and Addiction Equity Act (Parity Act) requires that care for substance use disorders have generally the same type, duration, range of service options and patient financial burden as the care currently available to patients with comparable physical illnesses.

The GOOD NEWS IS THAT NOW, like no other time in our history, we have the chance to change the way in which substance use disorders are perceived and managed.

These pieces of legislation, combined with advances in science regarding the nature of the disease and how best to manage its progression, provide us with a real opportunity to focus significant national attention and funding towards developing an infrastructure for preventing and treating adolescent substance use disorders.

The implications are significant. For the first time, substance use disorders will be treated like other chronic illnesses and health plans will be required to offer care for the full spectrum of substance use disorders at par with other medical disorders. As such, prevention and early intervention should be available to prevent the progressive behavioral and brain changes that often become the chronic illness of addiction. Prevention and early intervention therefore represent clear opportunities for downstream cost-offsets. Furthermore, since ACA extends dependent coverage under a parent's healthcare plan until the age of 26 years, and since substance use disorders regularly develop during adolescence and emerge as serious problems in young adulthood, insurers would be wise to improve prevention, early intervention, treatment and continuing care services during this critical period.

This is such an obvious and achievable suggestion it may be wondered why it has not been standard practice. Historically, "addiction" services were separated from other healthcare coverage, or 'carved out' to a third party insurer. This third party was administratively separate from the larger healthcare plan, and their profits depended on limiting costs and utilization of behavioral health services. They accrued no benefit for offsets to other medical care costs — as those costs were in separate budgets usually administered by separate companies. Under the new legislation, many healthcare plans are reconsidering this approach and 'carving in' behavioral healthcare as part of their major medical benefit with the explicit goal of improving overall healthcare outcomes and reducing overall healthcare costs attendant to substance use and mental health disorders.

Furthermore, since ACA extends dependent coverage under a parent's healthcare plan until the age of 26 years, and since substance use disorders regularly develop during adolescence and emerge as serious problems in young adulthood, insurers would be wise to improve prevention, early intervention, treatment and continuing care services during this critical period.

CHILDHOOD OBESITY PREVENTION AND MANAGEMENT AS A FRAMEWORK

Research has clearly demonstrated that substance use disorders are chronic medical illnesses, with biological, social and behavioral components. And like other chronic medical illnesses (i.e. Type-II Diabetes) substance use disorders are best managed with an appropriate combination of clinically-proven approaches that include prevention, early intervention, treatment and continuing care.

Type-II Diabetes provides an apt comparison with addiction: genetic heritability imparts underlying risk, but the disease is fundamentally an acquired, progressive illness that develops when efforts at self-management of critical health behaviors cannot overcome genetic and environmental vulnerabilities. Because diabetes is unambiguously an illness with a long history of clinical research and chronic care, we believe it can serve as an illustrative framework for what is necessary — and what is now possible — for reducing the burden of substance use disorders in this country.

Nationally, we have made significant strides in the prevention and management of Type-II Diabetes through coordinated efforts to educate physicians, individuals and families about the importance of early identification of symptoms and long-term disease management through both clinical care and lifestyle changes. Recent proactive, multi-faceted efforts in this country to reduce the rates of childhood obesity, a primary factor in the development of Type-II Diabetes and other major health complications, have provided a roadmap for what is possible in the substance abuse prevention arena. Multifaceted initiatives, across multiple sectors, have rapidly lessened a rising epidemic of childhood obesity.

Major corporations have committed to manufacturing and stocking healthier food options.

Schools have increased physical fitness and nutrition curricula, and have reduced the unhealthy food options in cafeterias and vending machines.

Physicians have been trained to carefully monitor BMI and intervene early, providing guidance on lifestyle changes in addition to medical interventions.

Foundations and government funders have supported investments in community-based approaches to prevention of childhood obesity.

Parents have tools and resources to help prevent and reverse obesity in their children.

Insurers have invested in wellness initiatives aimed at preventing the development of the disease by teaching and maintaining healthy lifestyle changes such as exercise, improved nutrition and stress management.

We are already seeing the impact of these initiatives to reduce childhood obesity — and will continue to see that the pipeline to Type-II Diabetes will grow narrower as the rates of childhood obesity in this country decline. This approach to preventing and/or intervening early in the course of the illness provides an apt analogy for what could and should be done for adolescents with emerging substance use problems. And the management of patients who develop Type-II Diabetes, through the integration of lifestyle modifications and, as necessary, medications, to try to treat the illness before it progresses to a more dangerous level, is a model for the treatment of substance use disorders.

Patients who do develop Type-II Diabetes are not just managed within the hospital or even medical clinic setting, and their care is not time limited as it so often is now in the case of patients' substance use disorders. Diabetes is now considered best treated proactively by multidisciplinary teams of healthcare professionals that no longer simply treat the results of a relapse in a hospital setting, but instead proactively monitor and manage early signs of relapse through clinical contacts and family supports. Because there is currently no cure for diabetes the recognized goal of care is stable self-management. The role of all medications, interventions and education is to prepare the patient and their family to actively and regularly self-manage their illness.

It should be clear that although there are important differences in the nature and manifestation of diabetes and substance use disorders, there are many similarities in the genetic and behavioral factors associated with the onset, course, management and monitoring of these two chronic illnesses. The coordinated and multi-sector commitment to reducing childhood obesity and in treating Type-II Diabetes shines light on what is possible — and what must be done — to reduce adolescent substance abuse, to change the trajectory of young lives, and to reduce the burden of adult addiction.

PART 1:
The Individual, Societal and Financial Consequences of Adolescent Alcohol and Other Drug Use and Substance Use Disorders

BACKGROUND

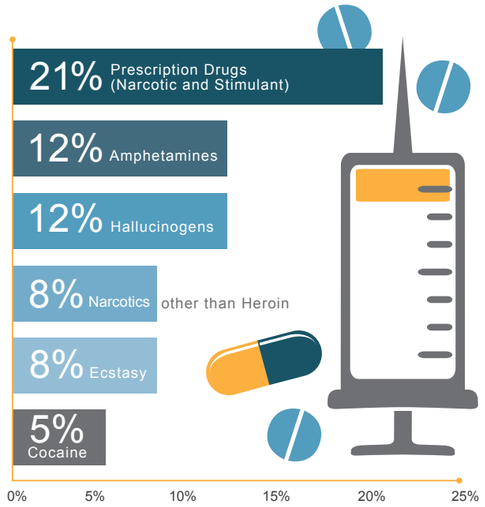
It can be said that the US public has become much more tolerant of substance use in society. At this writing, 28 states now support "medical marijuana," and two states have legalized the sale and use of marijuana (for adults). Each year at prom time, there are scores of families that provide alcohol to their underage children under the view that they will be safe in those surroundings and they will learn responsible drinking. With this as a background, we are frequently asked: "Is adolescent substance abuse that big of a deal when adolescents 'just' drink and smoke weed?" There are two lines of research that can be used to answer this question.

First, alcohol and marijuana are not benign substances, particularly on the developing adolescent brain. At a most basic level, the adolescent brain is more susceptible to the addictive effects of substances making use in and of itself a risky proposition. Marijuana, alcohol and all other drugs of abuse show diverse neurotoxic effects, adversely affecting brain development and maturation in the areas related to motivation, memory and learning, and inhibition [8, 12, 18-20].

Alcohol has more significant and more enduring effects on memory among adolescents than in adults. Compared with adults, adolescents show reduced sensitivity to alcohol's motor-impairing and sedative effects. This reduced sensitivity impacts alcohol consumption (e.g., when a person does not stop drinking voluntarily, eventually they will become so incapacitated that they cannot continue to drink even if they want to) and may help explain the developmental phenomenon of why adolescents are able to drink larger amounts of alcohol in one sitting. In fact, more than 90% of adolescent alcohol use is consumed during binge drinking with underage drinkers consuming more drinks per drinking occasion than adult drinkers [21]. Not surprisingly, adolescents frequently achieve higher blood alcohol concentrations in the process which increases the risk of alcohol poisoning. Frequent, heavy alcohol consumption, reduced sensitivity to the physiological processes that help to limit drinking, and increased vulnerability of the developing brain to alcohol's many harmful effects are just three of many factors that can combine to result in cognitive deficits and other problems that persist far beyond adolescence, or even death [22-24].

In terms of marijuana, adolescent marijuana use significantly increases the risks for impaired respiratory function, cardiovascular disease, precancerous cells and psychotic symptoms [25]. This latter finding is alarming, for there is some evidence to suggest a causal link between early marijuana use and the onset of schizophrenia [26, 27]. Marijuana use among adolescents is not always confined to weekends or special occasions. Roughly one in fifteen high school seniors is a daily, or near-daily, marijuana user [9]. In fact, the neurotoxic effect of cannabis on the adolescent brain was recently reported to contribute to IQ decline with no evidence to suggest the relationship was confounded by personality differences or socioeconomic status [28, 29].

Some adults have argued that "marijuana is safer than alcohol" suggesting that smoking marijuana may be a safer alternative to drinking alcohol. But marijuana is only one of the many drugs concurrently used by adolescents; and use of marijuana appears to increase the risk of other illicit



Institute for Social Research Survey Results:
High School Seniors Report on Use of Drugs

drug use [25]. In fact, while alcohol and marijuana remain the major substances used by this age group, an adolescent's drug of choice is frequently "the drug that is available." It is not surprising then that national surveys find that high school seniors report lifetime use of prescription drugs [narcotic and stimulant (21%)], Amphetamines (12%), Hallucinogens (12%), narcotics other than heroin (e.g., Vicodin, OxyContin – 8%), Ecstasy (8%), and Cocaine (5%)[9]. Given that these youth are still in school, use statistics undoubtedly underestimate teenage drug use, for school drop-out is relatively common among substance abusing youth. Further, in addition to the more "traditional illicit drugs," adolescents are now purposely seeking out new "designer" or "synthetic" drugs. These drugs produce cheap, legal highs and clean urines: "street chemists" are continually changing chemical compositions so as avoid government bans and many drug tests cannot keep up with the changing compounds. These designer drugs (e.g., K2, Spice, Ivory Wave, Vanilla Sky) can cause very serious side effects including recurrent acute kidney injury [30], intense psychosis/delirium [31-33], and overdose and death [34-36].

Skeptics will counter that these national statistics do not apply to suburban teenagers, but assumptions of a "safer" suburban population are wrong. The Manhattan Institute for Policy Research, using national data, found that drug use of suburban adolescents equals and even exceeds drug use of urban adolescents [37]. Research by the Treatment Research Institute (TRI) confirms this: urban adolescents participating in one of our current research projects frequently report use of marijuana only, while suburban adolescents often rattle off a surprising number of drugs used. The pharmacological properties of the full range of synthetic and non-synthetic drugs coupled with a growing brain make substance use of any kind particularly dangerous for teenagers. In fact, the progression from use to abuse to dependence regardless of drug type can be fast and the fallouts severe. Moreover, the earlier the drug use the greater the likelihood that a substance use disorder will occur [12].

INDIVIDUAL CONSEQUENCES

Substance use disorders are strongly associated with the three leading causes of death among youth — accidents, homicide and suicide [38], and significantly contribute to unwanted pregnancy, school dropout, violence, and delinquency [39]. Since the brain continues to develop through age 25, it is not surprising that substance use during the formative years results in meaningful and often long-term consequences on brain development, brain functioning, and IQ [12, 18-20, 28]. It also directly contributes to the development of a host of chronic medical conditions including but not limited to asthma, depression, sexually transmitted infections

It is estimated that substance use disorders cost the United States $468 BILLION EACH YEAR [60]. Given that substance use disorders often originate in adolescence, it is not surprising that THESE COSTS ARE DRIVEN BY THOSE WHO BEGAN USE IN THEIR YOUTH [8].

and HIV [8, 40], and increases the risk for psychosis [41]. Substance use disorder's association with these and other medical conditions such as liver problems and breast disease leads to early mortality [42, 43]. In addition to these medical and psychiatric consequences, substance use disorder itself, as well as its sequelae, results in multiple short- and long-term functional deficits across numerous life domains (e.g., relational, educational, vocational, financial). In fact, a recent study found that adolescent drug use was predictive of these adverse outcomes out to 50 years of age [44].

SOCIETAL CONSEQUENCES

The short and long-term costs of adolescent substance use are enormous. Given that those who begin use prior to age 15 are five times more likely to have a substance use disorder later in life [12], the personal and public health burdens and their associated costs can follow substance abusing adolescents throughout their lifetime.

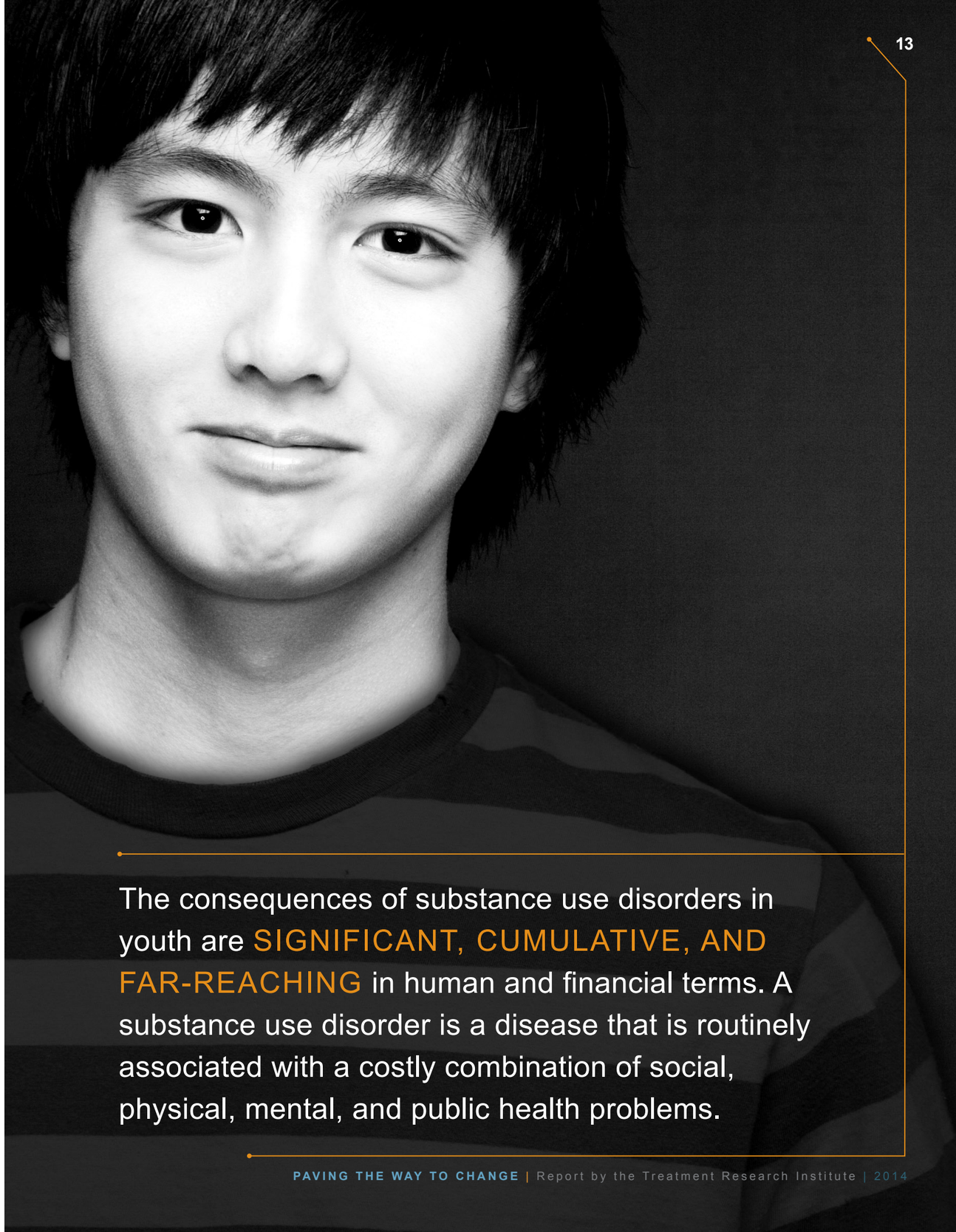
Accidents and unintentional injury, sexually transmitted and other infectious diseases, child abuse and neglect, crime, homelessness, and unemployment are just some of the societal problems brought about by substance abuse [39, 40, 45-48]. Furthermore, health, social and safety problems extend to family members (and peers) and occur among families regardless of socioeconomic status with substantial and widespread impact. For example, family members of substance abusing individuals have increased risks of physical illness, financial problems, legal difficulties, decreased martial satisfaction, domestic violence, interpersonal conflict, impairment in psychological and interpersonal functioning, and stress [44, 49-59].

FINANCIAL CONSEQUENCES

Because a substance use disorder is a progressive disease, when untreated or under-treated, *the human and financial costs compound over a lifetime*. It is estimated that substance use disorders cost the United States $468 billion each year [60]. *Given that substance use disorders often originate in adolescence, it is not surprising that these costs are driven by those who began use in their youth* [8]. The significant human costs (e.g., violence, high school dropout) and accompanying financial costs limit the quality of life for the youth, their family, their community / neighborhood, and society.

This brief review illustrates that the impact of substance use disorders is pervasive especially during adolescence. So, to the question: "Is adolescent substance abuse that big of a deal when they "just" drink and smoke weed?" The answer is a resounding: "Yes, use and abuse of substances by American teenagers is a big deal."

The consequences of substance use disorders in youth are significant, cumulative, and far-reaching in human and financial terms. A substance use disorder is a disease that is routinely associated with a costly combination of social, physical, mental, and public health problems.



The consequences of substance use disorders in youth are SIGNIFICANT, CUMULATIVE, AND FAR-REACHING in human and financial terms. A substance use disorder is a disease that is routinely associated with a costly combination of social, physical, mental, and public health problems.

PART 2:
The Current Adolescent Substance Abuse Treatment (SAT) System: Why it is Failing our Kids

BACKGROUND

At first glance, the current adolescent treatment system for substance use disorders appears to embody a full continuum of care that includes prevention, early intervention, formal treatment and continuing care services. But looks can be deceiving. While there is treatment for this disease, it is woefully inadequate in terms of type, quantity, and quality of services. In reality, the current adolescent SAT system includes limited amounts of prevention, early intervention, and continuing care services. Instead, resources are concentrated on treatment of some of the emergent physiological symptoms of the illness (withdrawal, physiological stabilization) and usually in acute care settings such as residential programs. Moreover, because of the historical stigma attached to this disorder, reimbursement for care has been restricted to just those adolescents who are already "in deep" with severe substance use and often associated juvenile justice and/or mental health problems.

Alarmingly, despite the bulk of resources being devoted to acute adolescent SAT, it is severely underperforming in quality as measured in at least four ways.

First, there is not enough attention to the early stages of substance use disorders. Currently in outpatient treatment programs, youth with low levels of AOD use are typically grouped with youth with high levels of AOD use. While the topic of "deviancy training" is controversial, there is evidence to suggest that youth forge new friendships within these groups [61]. Infrequent users can become more frequent users as a result.

Second, there may not be enough treatment programs specializing in adolescent substance use disorders. Adolescent-specific programs are necessary given developmental challenges and the need to separate youth with substance use disorders from adults with substance use disorders.

Third, the underutilization of evidence-based practices (EBPs) within specialty adolescent substance abuse treatment that does exist is pervasive, which affects the quality and effectiveness of treatment.

Fourth, treatment operates within an acute versus chronic disease model. This focus on the acute expression of the disease is the most likely reason for lack of continuing care services, a staple of disease management for any other chronic illness.

ACUTE VERSUS CHRONIC CARE

The approach to prevention, early intervention, treatment and continuing care of substance use disorders should follow a chronic disease model for management. As mentioned before, the system is focused on acute care designed to address only the most observable and serious emergent physiological stabilization problems. Further, even this care is restricted to predominately deep-end populations (e.g., adolescents already involved with the juvenile justice system, adolescents who meet dependent or severe diagnostic criteria). This is in direct contrast to informed public health approaches to other chronic conditions.

PREVENTION AND EARLY INTERVENTION

Decades of clinical research have shown that prevention, early intervention for emerging "risky" substance use, and continuing care following formal treatment are important for an effective public health oriented approach

This LACK OF PREVENTATIVE and EARLY INTERVENTION CARE for adolescent substance use problems is illustrative of the limitations of our current approach to managing these disorders within an acute care disease model.

to controlling substance use disorders among adolescents — but are too often overlooked. This failure to offer effective, accessible prevention and early intervention services comes at a high-price for our youth. Too often, clear warning signs of an emerging substance use problem are not addressed (e.g., binge drinking and drug use pictures posted on social media, drop in grades, change in friends), in part because early intervention services are not accessible and higher level interventions are not yet appropriate. In addition to these "red flags," research has shown that there are certain populations of adolescents for whom the risk of developing a substance use disorder is greater (e.g., those whose parents are receiving substance abuse treatment, those with a mental health disorder), yet few are identified and provided with wellness, risk reduction, or early interventions.

This lack of preventative and early intervention care for adolescent substance use problems is illustrative of the limitations of our current approach to managing these disorders within an acute care disease model. In contrast, the way in which emergent symptoms or increased risk profile for childhood obesity and the development of Type-II Diabetes are addressed provides an excellent example of early chronic disease prevention and management. Imagine an overweight adolescent at his/her annual pediatric check-up. Questions regarding diet and exercise would surely be asked, family medical history would be reviewed, and recommendations would be made to address lifestyle behaviors related to health. With a diagnosis of "pre-diabetic," the teen's healthcare insurance would provide coverage for nutritional and fitness support services to help him/her manage his/her health problem before it gets worse.

CONTINUING CARE

For those who have a substance use disorder and find themselves at the end of an acute treatment episode of care, little to no monitoring or continuing care is provided. Research shows that there is no reliable cure, thus a fixed period of protected residential care or outpatient treatment is not by itself likely to arrest use and promote healthy adjustment in the long term. Like any other chronic illness that can be managed but not cured — substance use disorders require a period of continued monitoring and supports. Unfortunately, these post-treatment services are rarely available in adequate quantity or quality to forestall a relapse.

Once again, Type-II Diabetes offers an illustrative contrast. If we were to treat it according to the acute care model currently used with AOD, a patient with Type-II Diabetes would not be eligible to receive medical care until after suffering one of the more serious complications of his/her condition (i.e., losing a foot or falling into a diabetic coma). At this point, they would be sent to a specialty treatment facility for a discrete number of days and given very few evidence based treatments or practices. Upon discharge, the patient would return home without medication, a continuing care plan, or a

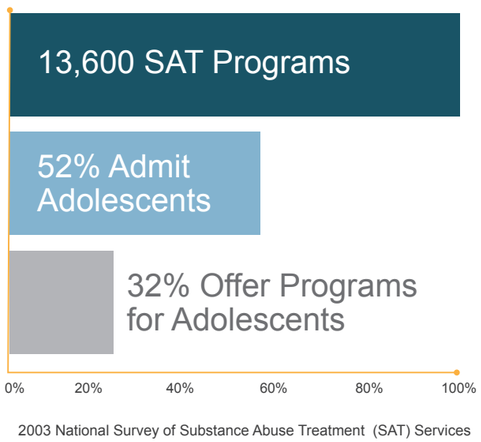
There is NO OTHER CHRONIC DISEASE where such an ILL-FATED APPROACH to prevention and treatment is standard practice.

follow-up appointment. The patient would not see a medical professional until the next serious health consequence related to their diabetes occurred and the same inadequate process would be repeated.

Clearly, this approach is nonsensical, dangerous and costly. In this sense, our current approach to the treatment of addiction would be considered malpractice in any other area of medicine. There is no other chronic disease where such an ill-fated approach to prevention and treatment is standard practice.

LACK OF QUALITY TREATMENT, LACK OF UTILIZATION

The limited number of adolescent SAT programs coupled with under-utilization and the variations in care and quality of those that do exist renders many youth unable to benefit from the best the field has to offer. For example, work by Knudsen et al. [62] analyzing data from the 2003 National Survey of Substance Abuse Treatment Services (N-SSATS) reported that of the roughly 13,600 SAT programs in the country, only 52% admitted adolescent clients, and only 32% offered "programs or groups" specially designed for adolescents. This situation is even graver today as less than 30% of addiction treatment programs in this country now offer special programming for adolescents [63]. To make matters worse, only 8.4% of the 1.7 million youth in need of addiction treatment are receiving specialty care [1]. This is typically referred to as the "treatment gap," yet our experience shows significant under-utilization of the specialty programs that do exist [64].



2003 National Survey of Substance Abuse Treatment (SAT) Services

A significant contributor to this under-utilization is likely the lack of identification or minimization of the adolescent substance abuse problem itself (discussed earlier). Additionally, several practices of adolescent treatment programs themselves may contribute to their under-utilization. For example, grouping low-level substance users with high-level users, and mixing younger teens with older teens [especially a young girl (e.g., age 14) and older boy (e.g., age 18) may exacerbate problems and are reasons parents cite for not wanting to send an adolescent child to treatment.

As we work to improve the system and solidify a real continuum of care, we will have a much better idea of whether demand for treatment really exceeds availability as suggested by the "treatment gap," and to what degree lack of utilization is a consequence of developmentally inappropriate care.

EVIDENCE-BASED PRACTICES AND TREATMENTS ARE NOT WIDELY IMPLEMENTED

In addition to the inadequate quantity of adolescent programs, there is also a pervasive lack of quality.

There is great variability in the amount and quality of the evidence based practices (EBPs) shown to be effective in addressing adolescent substance use disorders within existing programs [62, 65-70]. Based upon work by Drug Strategies [65] and by TRI [71], there are 10 broad principles with 62 corresponding discrete practices that have strong empirical, clinical, and expert support as being associated with reductions in substance use and co-occurring problems among adolescents with substance use disorders *(see Appendix A for a listing of these EBPs)*. There are also evidence based treatments (EBTs) for adolescent substance abusers. Family-based (e.g., multi-dimensional family therapy, functional family therapy), psychosocial based (e.g., cognitive behavioral therapy, motivational enhancement therapy), pharmacotherapies and integrative models (CBT/MET) have all been shown by extensive research to reduce AOD use among teenagers *(see Appendix B for a list of evidence based practices)*.

This substantial body of evidence — culled from both reviews of empirical research and the informed clinical views of experts in the field of adolescent treatment — demonstrates that providing adequate and appropriate EBPs and EBTs for substance use disorders can improve not only substance use outcomes (e.g., reduce alcohol or other drug use) but also can positively impact other life domains (e.g., interpersonal functioning) [72]. In a related manner, SAT treatment can lessen the rate, duration, and intensity of many health and behavioral health problems and consequently cut or at least control the growth of overall health care costs [73]. Societal costs can also be lessened by increases in productivity (e.g., academic success) and reductions in public health threats [73].

Despite research supporting evidence-based care for adolescent substance use disorders, a study of 144 highly regarded adolescent treatment programs throughout the country found that only about half of existing EBPs were offered [65]; and there was essentially no change in a one year follow-up [74]. Mark et al. [68] also showed that there was wide variability in a different set of community programs in the availability of commonly accepted EBPs, such as a comprehensive admission assessment, individualized treatment plans and engagement of parents in treatment and discharge planning.

Regardless of program type, program cost, or data collection method, very similar results are found. That is, modest (at best) levels of EBPs are available in community programs [62, 65, 68, 70, 74-76]. In other words, the majority of adolescent SAT programs in this country offer very few of the clinical and social support services that have been demonstrated to be effective. Without quality and targeted intervention and adequate post-acute care, relapse and re-treatment are essentially assured and the same youth is more likely to cycle in and out of multiple systems of care [77].with each intervention "failure" accompanied by a "repeat" cost to the same or some other sector of the system. In addition to the fact that this is a costly and truly inefficient use of public health resources [17], the devastation this causes to young lives, families, and communities is incalculable.

CONCLUSION

The adolescent SAT approach is akin to ignoring warning signs, treating only the acute expression of chronic disease, and failing to provide any follow-up monitoring or care. *This treatment approach would never be tolerated in physical medicine and it should never be tolerated in the treatment of substance use disorders — particularly adolescent substance use disorders.* Fortunately, there are ways to address limitations of adolescent SAT at every point on the treatment continuum. We have the knowledge: we need the will, the policies, and the resources to do so. To this end, Part 3 of this paper calls the reader to action. We have purposely delineated many calls to action presented as *Paving the Way* blueprints so that you can choose those areas most important to you and begin your work.

PART 3:
A New Way to View and Treat Adolescent Alcohol and Other Drug Use and Substance Use Disorders

WHERE TO START

It is easy to become paralyzed in the face of discouraging information and the already large and growing size of the problem. We cannot afford inaction: too much is at stake and too much is changing. While the adolescent SAT system is problematic, it can be improved if we coordinate our efforts. Consequently, we have developed concrete action steps that, when used collaboratively by parents, treatment providers, researchers, insurers, and other funders, should begin to bring about needed change for youth at risk for a substance use disorder, using, abusing or dependent on alcohol or other drugs, and recovering from a substance use disorder. Attention needs to be paid to youth in all stages of the substance abuse continuum. By addressing the basic components of care considered for all other chronic illnesses (i.e., screening, wellness and prevention, early intervention, quality, and continuing care), there are systematic opportunities to transform the adolescent substance abuse treatment system.

ATTENTION NEEDS TO BE PAID TO YOUTH in all stages of the substance abuse continuum.

SCREENING

Screening for Risk Factors or Early Disease Presence

Substance use problems are ubiquitous in all the settings where adolescents are found: schools, pediatric healthcare settings, juvenile justice facilities, etc. But it can be prevented and early use can be halted before it becomes addiction — but there have to be structures in place to provide early detection and appropriate, non-punitive intervention. Thus, screening for risk factors or early disease presence is one of the first lines of defense.

In fact, substance use screening should be part of all wellness screens as this can have direct impact on healthy living. While adolescents should be screened within all treatment and social services systems that they come in contact with (e.g., mental health system, foster care system, juvenile justice system), there are two locations where large numbers of "general population" youth can be found: medical settings (e.g., pediatric offices and primary care facilities) and schools.

Screening in Medical Settings

Screening, Brief Intervention and Referral to Treatment (SBIRT) is a scientifically validated, nationally recognized approach to screening for and addressing AOD problems within medical settings. It is endorsed by the National Institute of Alcohol Abuse and Alcoholism (NIAAA), the National Institute on Drug Abuse (NIDA), the Substance Abuse and Mental Health Services Administration (SAMHSA), and perhaps most importantly by the American Academy of Pediatrics [78, 79] and the American Medical Association (AMA). It is not endorsed, however, by the US Preventative Services Task Force for adolescents (it is endorsed for adults) due to lack of evidence. This is unfortunate as there is a growing body of solid scientific evidence demonstrating SBIRT's efficacy in reducing adolescent AOD use [80-85], perhaps because it incorporates principles and techniques (e.g., motivational interviewing) that are by themselves effective and applicable to this developmental stage [86]. Because endorsement by the US Preventative Services Task Force is instrumental in garnering service coverage within private and public insurers such as the State Children's Health Insurance Program (SCHIP), lack of endorsement will render the provision of AOD screenings and counseling services within primary care and other medical settings for adolescents less than ideal.

A second problem is that adolescents who screen positive or show early signs of substance use problems rarely receive recommended levels of preventive care through primary care visits [87, 88]. Lack of reimbursement for such services is a crucial barrier but reimbursement issues should change under the ACA as *private plans* will be required to cover services recommended by the *Bright Futures Guidelines*, US Preventative Services Task Force and the CDC's Advisory Council on Immunization Practices. These include selective screenings and counseling for drug and tobacco use and healthy eating [78], in addition to screenings for depression, diabetes, cholesterol, obesity, HIV and sexually transmitted infections. Further, federal law requires comprehensive well-child examinations with screening services for developmental, mental, behavioral, and/or substance use disorders through the Early Periodic Screening Diagnosis and Treatment (EPSDT) component of Medicaid. EPSDT also finances treatment services but processes can be cumbersome and accessibility difficult.

PAVING THE WAY:
Encourage the US Preventative Services Task Force to support SBIRT

- Provide the US Preventative Services Task Force with all newly-acquired research information needed for their support.
- Encourage funders to fund secondary data analysis where data exists to address what the US Preventative Services Task Force view as gaps in evidence.
- Encourage funders to fund studies necessary to address what the US Preventative Services Task Force views as gaps in evidence.

Screening in Schools

If we are looking to increase the reach of substance use screenings to identify and appropriately intervene with youth with AOD risk factors, youth who have begun to use AOD, or youth who show signs of AOD dependence, then schools are a logical location to implement SBIRT-type protocols, as they see large numbers of adolescents each day. There are also special aspects of the school setting which could support the widespread use of SBIRT. For example, visits to the school nurse are a normal part of the school day which removes the stigma of each visit.

Currently there are roughly 1,930 SBHCs in 50 states, with the majority (82.7%) serving at least one adolescent in grade 6 or higher [93].

Schools that are fortunate to have a School-Based Health Center (SBHC) are in an excellent position to pro-actively screen large numbers of adolescents for AOD risks, AOD use, and substance use disorders during routine appointments and care. By offering population-based services, they become a "normalized" part of the school community, de-stigmatizing SBHC visits and assuring anonymity for the specific service received. Research to date shows SBHCs increase access to behavioral health services and reduce traditional barriers to care such as funding, stigma, and confidentiality concerns [89, 90]. SBHCs also help reduce emergency room visits while increasing school attendance and student achievement [91, 92]. Importantly with regard to SBIRT, SBHCs have ready access to teens which facilitates follow-up, case management and the delivery of preventative care and brief interventions [89, 90].

Currently there are roughly 1,930 SBHCs in 50 states, with the majority (82.7%) serving at least one adolescent in grade 6 or higher [93]. SBHCs typically fall into one of three service categories:

1. **Primary Care** staffed by a primary care provider such as a nurse practitioner, physician assistant, or physician;
2. **Primary Care & Mental Health** staffed by a primary care provider in partnership with a mental health professional such as a licensed clinical social worker, psychologist, or substance abuse counselor; and
3. **Primary Care & Mental Health Plus** primary care and mental health staff are joined by other provider types to complement the health care team such as a health educator, oral health provider, social service, case manager, and/or a nutritionist) [94].

Many SBHCs provide access to mental health (70.8%) and oral health (15.9%) providers on-site and some even employ their own clinical support staff (85.8%), health educator (16%), and/or a nutritionist (10.7%) [94]. In terms of AOD specifically, more than half of SBHCs provide substance abuse counseling (53.2%) with nearly 1 in 10 (9.6%) having a trained alcohol and drug counselor on staff [94]. Given that such a school-based system exists, serves large numbers of youth, and has been shown to reduce health care costs and improve educational outcomes [89-92], it makes sense to support the universal implementation of SBIRT principles and procedures into SBHCs. Routinely incorporating AOD screening and other services into various SBHC protocols is a much needed and clearly achievable step in expanding prevention, early intervention and treatment.

While the inclusion of educational SBIRT-type services would clearly have the best fit within schools that have SBHCs, we cannot ignore students in schools without them. To this end, TRI researchers have developed a school-based screening and intervention model that shows real promise. We have demonstrated in early pilot work that educational-SBIRT programs can be incorporated into schools without SBHCs provided that an AOD counselor from a local treatment provider works within the school [95]. Results to date show that in an evaluation of 248 students randomly approached to participate, 100% accepted the screening and 42% of them (n=105) reported substance use. This is remarkable in comparison to the 28% who reported substance use via anonymous surveys in non-participating schools. Importantly, 99% of positively screened students voluntarily accepted one motivational counseling session and 68% returned for additional counseling sessions — all held during non-academic class times. These services fit well into the school prevention curriculum and did not interfere with academic activities. While more work is clearly needed, our service model may become another avenue for early identification of and intervention with AOD risks, use, and substance use disorders for students attending schools without SBHCs.

It is clear that the research on SBIRT and the future increase of dependent coverage for a variety of medical and behavioral screenings holds great promise: early risk and use can be identified and stopped in its tracks, reducing the likelihood of a future substance use disorder. There are, however, 5 primary challenges that could negatively impact SBIRT services:

1. **workforce** supply;
2. **lack of knowledge** of available intervention and treatment services;
3. **variable and often inadequate quality** of services that do exist;
4. **adolescent confidentiality** as it pertains to billing practices and co-pays; and
5. **funding** for SBHCs.

The following text and *Paving the Way* blueprints outline the changes necessary to address these issues successfully.

At a most basic level, there are not enough adolescent health specialists (466 certificates in adolescent medicine obtained between 1996 and 2005) to meet the needs of the estimated 40 million adolescents in this country [96]. The situation does not show signs of improvements as only 12% of pediatric residency training programs have an approved fellowship in Adolescent Medicine [96]. It is not surprising then that the American Board of Pediatrics found that only 17% of pediatricians think they are well trained to care for adolescents [96]. Workforce supply and preparedness are perhaps even more discouraging when one considers screening for and addressing adolescent AOD. First, physicians often feel unprepared to introduce preventative health content such as tobacco and injury prevention. More specifically, over half (56%) of healthcare providers feel unprepared (and uncomfortable) to discuss adolescent AOD issues generally and less than half stay current on AOD health related literature [86]. Furthermore, many feel unprepared to address an adolescent patient after a positive screening for drugs, behavioral, or reproductive issues [97]. The situation in the addiction education of nurses is equally problematic. Despite perceived importance of this clinical area by nurses themselves, they report a dearth of addiction education within their nursing curriculum. Among 213 surveyed advanced nurse practitioners, less than 3 hours of addictions education was received in their graduate programs [98].

PAVING THE WAY:
Preparing the Workforce

In order to address this significant barrier to care, we must increase the number of health care, mental health, and educational professionals experienced in identifying AOD use and its risk factors, in treating adolescents in general, and in treating adolescents with AOD issues specifically. Some ways that we can begin to achieve this through coordinated and strategic advocacy efforts include:

- Sponsoring expert-led webinars for providers on how to talk with adolescents about sensitive topics including substance use, the various ways in which screening can take place, and how to respond to a positive screen.
- Working with licensing bodies to require that a certain amount of continuing education credits relate to adolescent substance abuse topics for renewal of certifications and licenses.
- Developing adolescent substance abuse-focused coursework for use in medical and graduate schools .
- Developing adolescent substance abuse-focused cases for use during licensing exams and continuing education credits.
- Requiring pediatric, primary care and family practice residency programs (at a minimum) to include rotations in adolescent substance abuse medicine and treatment.
- Requiring psychologist, social worker, and guidance counselor practicum placements to include exposure to adolescent substance abuse treatment.
- Requiring nursing, physician assistant and medical assistant programs to include adolescent substance abuse-focused coursework, expanding the numbers of nurses who become a Certified Addictions Registered Nurse (CARN) or a Certified Addictions Registered Nurse — Advanced Practice, (CARN-AP), and expanding the number of Family Nurse Practitioner Programs that not only included specialty courses in addiction nursing [99] but include specialty courses in adolescent addiction nursing.
- Including basic substance abuse education in middle and high school teacher training.

In addition to workforce issues, another significant barrier is that there are essentially no objective resource guides to assist parents or other payers in the identification of those SAT programs that are appropriate, effective and of high quality for adolescents once need for treatment is established [71]. This is especially important as, thirdly, treatment programs are variable and often inadequate in the quality of care that they provide. It is not surprising that medically-based screening, prevention and referral to treatment services are rare when a provider does not have the resources or confidence in the system to make a quality referral. If a medical provider has to struggle to make a referral, they have been shown to just skip the screening process completely [100]. Thus, many youth in need are not screened, are not treated early, their substance use and other problems escalate, and more intensive and expensive care is needed than would not have been the case otherwise.

PAVING THE WAY:
What To Do About Resource Information

Ensure objective information on the range and quality of treatment services that exists is widely available.

Work with state agencies, insurance companies, and communities to support the development of geographic-specific or insurance plan-specific Consumer Guides to Adolescent SAT that:

- Displays the availability and quality of those EBPs shown to be effective.
- Identifies how to match what a youth needs with what is available.
- Educates on how to advocate for services needed that are not available or reimbursed.
- Educate providers, parents, adolescents, and other key stakeholders (e.g., judges) about availability of treatment for substance use disorders.

Fourth, adolescents covered within commercial insurance plans face unique financial and confidentiality challenges. While adolescents as young as 14 can consent to treatment for a substance use disorder without parental consent or knowledge (and we have found that many do so and refuse to provide consent for parental discussions), co-pays for specialty care under private insurance arrangements coupled with billing codes identifying type of services rendered may prevent many youth from seeking care in the first place (this should end in 2014 under ACA).

Finally, SBHC legislation introduced by Congresswoman Capps (CA-24) in 2009 and included in the 2010 Affordable Care Act, is set to expire at the end of 2014 if not reauthorized. This is the only source of federal funding dedicated to the operations of SBHCs. Importantly, however, all schools regardless of whether a SBHC exists or not would do well to consider allotting some funds for SBIRT. The evidence suggests that implementing a tailored SBIRT protocol is feasible and can be effective, resulting in numerous and long lasting benefits.

PAVING THE WAY:
What to do about Confidentiality and Explanation of Benefits Statements

- Clarify and educate primary care, family practice, and pediatric practices as well as electronic health record vendors, youth and families about federal confidentiality laws as well as those that govern their individual state.
- Have providers adopt formal confidentiality procedures with the adolescent.
- Work with health care practices, electronic health record vendors, and policy experts to design appropriate and legal ways to segment information in the patient record.
- Work with insurers, states, and policy experts to exclude information about sensitive services (e.g., AOD, sexual health) from Explanation of Benefits statements balancing a parent's need to know with a youth's right to privacy.

PAVING THE WAY:
What To Do About School Based Services

Work to ensure widespread penetration of SBHCs that include AOD services through the public school systems of this country:

- Garner the political environment and political support that are fundamental to the sustainability of SBHCs.
- Support Rep. Lois Capps' (CA-24) School-Based Health Centers Act, legislation that would provide continued federal support (with expansion dollars) for critical, high-quality comprehensive health care, mental health care and social services at School-Based Health Centers across the country. SBHC legislation introduced by Congresswoman Capps in 2009 and included in the 2010 Affordable Care Act, is set to expire at the end of 2014 if not reauthorized. This is the only source of federal resources dedicated to the operations of SBHCs.
- Develop toolkits that delineate the long-term financing policies required to sustain school-based health centers through mixed financing strategies involving federal, state and local sources in both the private and public sectors that were identified through the Robert Wood Johnson's *Center for Health and Health Care in Schools*.
- Work with school boards to allot funding for educational SBIRT-services and/or utilize Substance Abuse Prevention (SAP) teams to do so.
- Urge others working in this area to develop toolkits based upon other generalizable financing strategies for use by others (e.g., third party reimbursements).

WELLNESS

Incorporating Wellness as Common Practice

Wellness is a proactive and preventative approach devised to produce ideal levels of emotional, social, and physical health. Wellness encompasses the individual in their entirety, recognizing that everything that individual does has a direct impact on health (and therefore health care costs). Accordingly, a focus on wellness has grown rapidly in recent years as has the utilization of payer wellness programs. These programs result in improved health outcomes and real time cost savings [101, 102].

The basic premise of a wellness program is to reward participants to change physically and emotionally detrimental behaviors. Wellness initiatives are most commonly used in commercial health plans, and serve dual purposes — to promote healthy lifestyles while lowering overall long-term healthcare costs. Most typically, employers promote wellness programs that are largely based around stress management, exercise, smoking cessation and disease prevention and operate such programs by offering various rewards directly to employees for participation. Wellness programs encourage employees to actively participate in improving their own personal health by attending health education courses and seminars, regular attendance at gyms and health clubs, as well as maintaining healthy levels of blood pressure and body mass index, for example. In exchange for program participation, employees improve their personal health outcomes and earn rewards such as cash, discounts on fitness activities and products, and vacation days.

In addition to promoting employee health outcomes and wellbeing, wellness programs can drastically cut employer health costs. In the most basic sense, healthier employees require less medical care, and lower medical care costs save employers money. Recent research has shown that wellness plans are effective — each dollar spent on wellness programs equates to approximately $3.27 savings in healthcare costs [101]. Savings are also realized in employee absenteeism rates, at a rate of $2.73 for each dollar spent on wellness initiatives [101].

The basic premise of wellness programs — that individuals are more likely to make healthy lifestyle changes when given incentives — has been applied to adolescent populations as well. Using the same wellness program model, payers have created inventive programs targeted toward adolescents — most notably regarding obesity and Type-II Diabetes, which again gives us guidance on how AOD might be integrated into health systems.

If we do our part within these *Paving the Way* blueprints, the universal provision of effective screening and referral services is within our reach. To summarize, we can pave the way to change when we work together to: include addiction education within medical, mental health, and educational trainings, work with the *US Preventative Services Task Force* to identify (and study) what is needed for SBIRT endorsement for adolescents, employ screenings that adolescents will complete, adopt a consumer guide approach to resource identification for use by referral practitioners, address confidentiality issues within electronic health records and explanation of benefits summaries, and work to ensure funding for SBHCs.

PAVING THE WAY:
Working with Employers to Get Wellness Coverage

When you work with employers to include comprehensive wellness coverage for dependents, particularly those at-risk for substance use disorders, know these facts because so much is about the company bottom line.

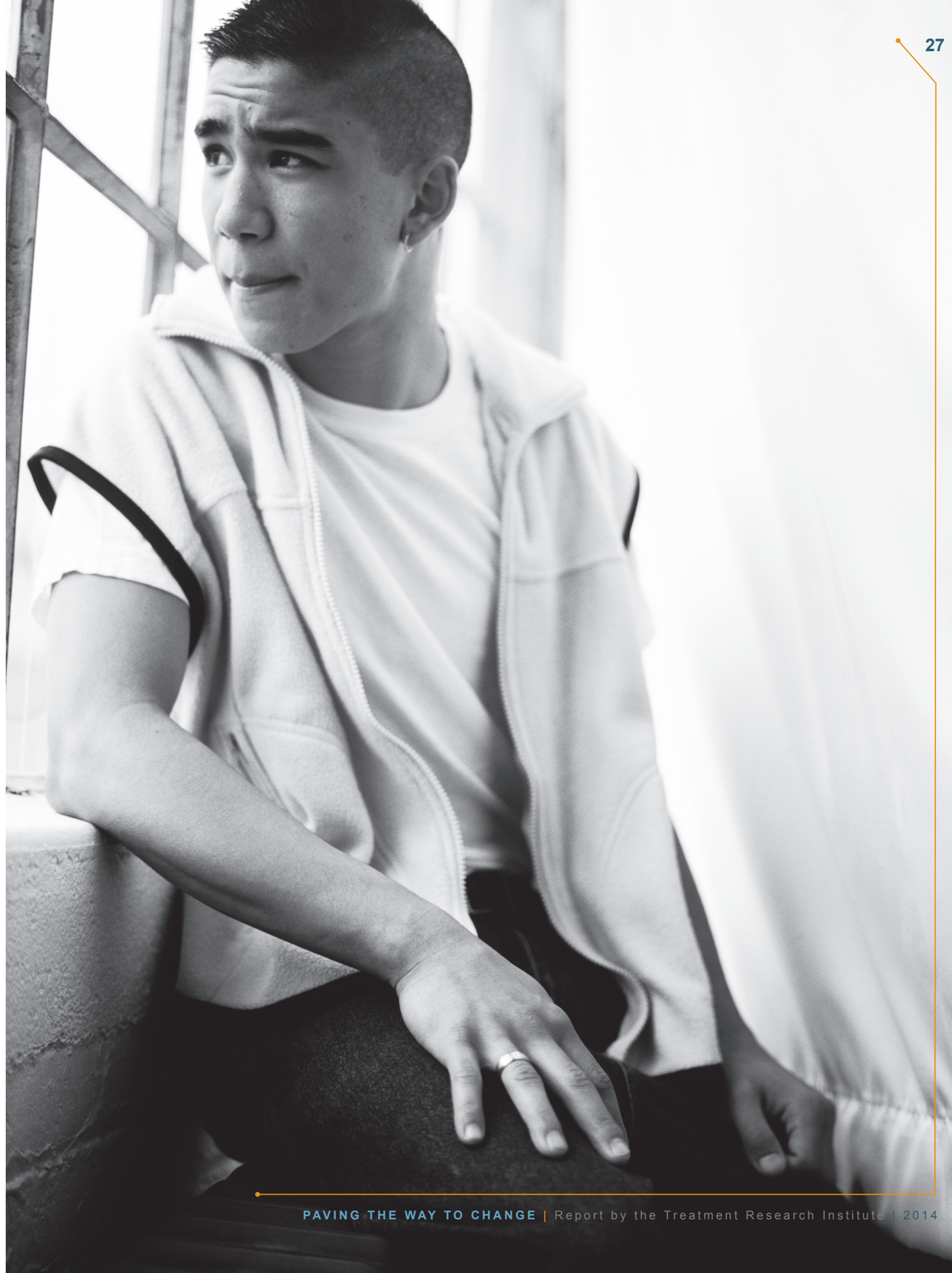
- A small number of conditions account for the vast majority of employer-related and health care costs and two of these (depression and stress) result from adolescent substance use disorders. Consequently, preventing substance use from happening and intervening early when it does occur can minimize or offset not only health care costs for the individual with a substance use disorder but also those for their family members and that person's employer(s).
- Caring for a special needs or medically ill child has consistently been shown to increase stress, depression, and health risks, reduce workplace productivity and performance, and increase absenteeism and job turnover [103].
- Caring for a family member (all ages) with a substance use disorder has been shown to increase family member insurance costs as a result of more psychiatric and medical conditions in the family when compared to families without a member with a substance use disorder [104] and when compared to families with a member who has diabetes or asthma [58].
- Caring for a child with a substance use disorder undermines parental wellbeing and mental health including somatic and social stress, depression, anxiety, fear of danger, guilt, anger and despair [10, 11, 105].

As insurers are increasingly aware of the long-term costs of managing health consequences of child and adolescent obesity, including Type-II Diabetes, many have developed innovative wellness programs to promote healthy-eating and physical activity. In addition to providing coverage for healthy lifestyle services for at-risk patients, such as nutrition counseling, many insurers offer incentives for patients to engage in health promoting activities, including discounts on gym membership, weight-loss classes or exercise equipment.

Like Type-II Diabetes, adolescent substance abuse often leads to significant related health costs, both short and long-term. In addition to the damage suffered by the adolescent, research has shown family members of substance abusing individuals have increased risks of physical illness and emotional stress [44, 49-59], resulting in increased healthcare costs for the entire family. This, of course, also means higher healthcare insurance costs for employers. Clearly, employers would be wise to provide coverage for healthy lifestyle services and health promoting activities for dependents, particularly those with AOD risk factors or emerging disease presence. And employees would be smart to know the facts about how this disease impacts a company's bottom line.

AOD treatment reduces medical costs for family members in general [104] and depression and stress for individual and family-based interventions for adolescent SUD specifically [11].

Clearly wellness for all youth is ideal and has the potential for maximum impact on long term health and related costs hundreds of billions of dollars are spent annually to treat diseases that are preventable [106]. Far too often health care in general, and behavioral health care in particular, focuses more on treating disease than preventing it. This is a backward tactic: preventing disease is not only the most common-sense sense approach to improve health, but it is also the most cost-effective.



Importantly, the ACA has numerous provisions to encourage prevention/wellness and public health. These include:

- The Prevention and Public Health Fund ($15 billion dollars) to support screenings, prevention, wellness, and public health activities
- No-cost preventive health services within health plans subject to the ACA
- The National Prevention and Health Promotion Strategy that includes building healthy and safe communities, expanding wellness and prevention in clinical and community settings, empowering people to make healthy choices, and eliminating health disparities

Prevention of substance use disorders through wellness programs especially among adolescents with AOD risk factors, with emerging disease presence, and during transitional risk periods of adolescence fits into each one of these ACA provisions.

For employers who will be required to offer no-cost preventative health services, an obesity-focused toolkit offered by National Business Group on Health, one of many toolkits offered by the group [7, 107], could serve as an educational and benefit design model that can be adapted for AOD. The existing obesity-focused toolkit helps employers to best utilize physicians and health plans to ensure that children who are obese receive the care they need. Employers are informed of current best practices, treatment guidelines, and performance standards so that they are well informed when developing their company health plans. An analogous adolescent addiction-specific toolkit could: 1) inform employers of the prevalence and costs of addiction; and 2) guide them to select benefits packages that will best help their employee's dependents (and in the long-term, help shape the addiction treatment field). A toolkit like this should encourage a full continuum of AOD care as well as overall wellness type services including prevention and recovery support. Additionally, given that each state has received Prevention and Public Health Fund dollars and that there is a national wellness strategy, our field must work to ensure that children and youth are at the forefront and that AOD wellness and prevention are included in state plans and the federal strategy.

PAVING THE WAY:
Work with Public and Private Payers to Include Comprehensive Wellness Programs for Youth

- Work with the National Business Group on Health to add AOD to their benefit design toolkit.
- Urge others working in this area to develop toolkits based upon other generalizable financing strategies for use by others (e.g., third party reimbursements).
- Work to make sure adolescent AOD wellness and prevention programs are specifically included in state plans that receive dollars through the Prevention and Public Health Fund.
- Work to make sure adolescent AOD prevention/wellness is specifically addressed (and not just mentioned under a mental health component) within the National Prevention and Health Promotion Strategy.
- As mentioned in other *Paving the Way* blueprints, streamline processes within Medicaid to increase accessibility of funds earmarked for EPSDT to screen for, intervene early and treat adolescents at risk for substance use or those with varying degrees of substance use.

If we do our part within these *Paving the Way* blueprints, the universal provision of wellness and prevention programs is within our reach. To summarize, we can pave the way to change when we work with employers, and public and private payers to include wellness programs for youth. This will only happen when we are informed of the research done on the effects of family AOD use on employee behavior and employer bottom lines.

A critical and MISSING ELEMENT in improving the adolescent substance abuse treatment system is TARGETED INTERVENTION that addresses EARLY SIGNS of behavioral health risks and problems before youth meet criteria for a DSM diagnosis (i.e., preclinical levels of service).

ESTABLISHING PROPER EARLY INTERVENTION SERVICES

A critical and missing element in improving the adolescent substance abuse treatment system is targeted intervention that addresses early signs of behavioral health risks and problems before youth meet criteria for a DSM diagnosis (i.e., preclinical levels of service). Although adolescents may not meet diagnostic criteria early on due to the short-term nature of their history with substances, the immediate and long-term consequences of this behavior can be devastating on the developing brain, on educational attainment, and on social relationships among other things. Early intervention has been shown to be highly effective at reducing 'risky' use, and has the potential to significantly and positively impact the individual and overall cost effectiveness of care [108].

Early intervention can minimize the future utilization of high cost residential/inpatient SAT programs, increase the probability of a positive outcome, and potentially arrest the trajectory of addiction — thereby reducing downstream social, personal and financial costs.

Yet, these early services frequently tend to be overlooked and non-reimbursable within current financing systems and funding streams. This level of service is essential not only because early intervention forestalls addiction, but also because not all adolescents who have experienced serious consequences as a result of substance use will meet diagnostic criteria for a substance use disorder [109, 110]. These 'diagnostic orphans' are in need of treatment even though they may present with a constellation of symptoms that do not meet specific diagnostic criteria [111]. The American Academy of Pediatrics has shown tremendous leadership in developing, promoting and disseminating health supervision guidelines through its *Bright Futures* health promotion and disease prevention initiative. If included within the *Bright Futures* framework, early intervention services would no longer be overlooked, and the potential for service reimbursement would be increased.

Early intervention can minimize the future utilization of high cost residential/inpatient SAT programs, increase the probability of a positive outcome, and potentially arrest the trajectory of addiction — thereby reducing downstream social, personal and financial costs.

PAVING THE WAY:
Collaborate with the American Academy of Pediatrics:

- Expand the AOD Anticipatory Guidance Section within the Adolescent Component of Bright Futures to include early intervention discussions with both youth and parents (adhering to confidentiality requirements) for youth who report use. These discussions could include suggestions for involvement in early intervention including youth development programs.
- Identify what additional aspects of Bright Futures could address early intervention of AOD use, clearly specify any additional services that would need to be included, and work with the Academy to incorporate these services in policy and practice.
- Identify real (and potential) cost-savings and develop policies to re-allocate those dollars for early intervention.

PAVING THE WAY:
Work to re-allocate Block Grant savings to reimbursement/funding for early intervention services.

- Work with state and local governments to identify the number of uninsured individuals who have the potential for insurance through Medicaid or private expansion.
- Work with treatment providers to rapidly assist individuals with insurance applications to insure all eligible are enrolled.
- Identify real (and potential) cost-savings and develop policies to re-allocate those dollars for early intervention.
- As mentioned in other *Paving the Way* blueprints, streamline processes within Medicaid to increase accessibility of funds earmarked for Early Periodic Screening, Diagnosis and Treatment (EPSDT) to screen for, intervene early and treat adolescents at risk for substance use or those with varying degrees of substance use.

The mental health system is light years ahead with respect to identification and early intervention. The Early Detection and Intervention for the Prevention of Psychosis Program (EDIPPP) [112] trains the medical and educational community to recognize warning signs of psychosis and "quickly" refer young people for screening, early intervention and treatment. Early results show reduced rates of hospitalizations and psychotic episodes as well as improved school and job attendance. Substance use needs an EDIPPP-type program.

This early level of care, established by the American Society for Addiction Medicine is called the ASAM .5 Level of Care. It has been operationalized, and professionally vetted criteria have been developed to determine an individual's eligibility. Unfortunately, the .5 Level of Care is not often reimbursed or funded well. This could change under ACA, as more uninsured Americans will be covered. Currently, Block Grant funding is used to pay for treatment of the uninsured — but since this pool of uninsured individuals should decrease through Medicaid and employer-based health care expansion, it is possible that these Block Grant dollars could be re-directed to fund early intervention services. If this is achieved, it will help to make early intervention more widely available and accessible, not an underutilized service that exists largely in theory than in practice.

If we do our part within these *Paving the Way* blueprints, early intervention for adolescents who show early signs of behavioral health risks and problems before they meet criteria for a DSM diagnosis is within our reach. To summarize, we can pave the way to change when we work together to: encourage the American Academy of Pediatrics to expand Anticipatory Guidance for AOD use and address early intervention within their *Bright Futures* framework, re-allocate Block Grant dollars spent on the uninsured that are saved from health care expansion to early intervention services, perform financial mapping (see Part 4) to ascertain other areas where dollars could be re-allocated to early intervention, adopt an EDIPPP-based early intervention approach and examine its potential to rapidly treat (and impact) early signs of SUD.

A Note on Youth Who Have a Parent with a Substance Use Disorder (SUD)

While every adolescent should be screened, and wellness and early intervention delivered, particular attention should be given to one of the most at-risk groups of youth in America: those youth who have a parent or guardian with a SUD. A family history of SUD is one of the strongest risk factors for the development of a SUD due to genetic and biological risk as well as environmental exposure. Due to the solid evidence of this risk [113-116] which spans decades of addiction research, and the fact that one in five youth grows up in a household where someone has a SUD [8], it is negligent to not provide a range of screenings, wellness, and early intervention services for this population in a sensitive and non-stigmatizing way.

INCREASING QUALITY AND TRANSPARENCY IN ADOLESCENT SUBSTANCE ABUSE TREATMENT

Performance measurement, such as data reflecting quality of care, has become a field unto itself emanating from the push to improve the quality accountability within medical care. This makes sense and has research support. An extensive systematic review of what works in adolescent SUD treatment found is that treatment for SUD is most effective when it is of high quality and when evidence-based treatments and practices (EBTs/EBPs) are delivered well [117]. Consequently, one would think that quality indicators are commonplace in adolescent SAT because quality is critical to money well spent, youth well cared for, and outcomes appropriately realized. This is not the case. Unlike medical care where hospital performance data and physician-rating websites (e.g., Healthgrades) are relatively easy to find, in behavioral health care such data are virtually non-existent. In fact, less than 5% of the National Quality Forum's list of more than 650 vetted indicators specifically relate to treatment of mental health and substance use conditions [118].

Moreover, it is unfortunately the case throughout medical and behavioral healthcare that children and youth have repeatedly been left out of the discussion. While section 2701 of the Affordable Care Act has stimulated quality measurement activities and an initial core set of 51 measures even includes 11 that focus on mental health and substance use disorders, these pertain only to Medicaid-eligible adults. Once again, children and youth are neglected.

When children and youth do become part of these broader healthcare discussions, mental health and substance use disorders are typically overlooked. For example, the CHIPRA Reauthorization Act of 2009 called for healthcare quality measures to be used in Medicaid and CHIP programs [119]. In 2010, the Pediatric Quality Measures Program was launched through seven Centers of Excellence funded with $55 million and 10 state-level demonstration projects for $100 million [120, 121]. Content gaps were identified early on: mental health and substance abuse measures were missing from this work [121]. This is shocking as sample practice parameters and quality indicators for both mental health and substance use conditions do exist [65, 71, 122, 123]. These measures have had little penetration in real-world work to date. Work within CHIPRA is underway to address this, but leadership and coordination of efforts are lacking. Also, once these issues are addressed and CHIPRA includes behavioral health specific indicators, there are virtually no vehicles to disseminate performance information to the public.

While everyone would agree that high-quality services are important, many may question why publicly reporting performance is necessary. At a most basic level, publicly reported performance stimulates quality improvements [124]. Informed consumers are essential to improving quality and costs of services, particularly in healthcare [125-127]. In this regard, there is sparse scientific, comparative, consumer-oriented information regarding adolescent SAT. Given the seminal work of Drug Strategies and subsequent work of TRI in this area, we have the tools to obtain accurate,

PAVING THE WAY:
Bring Treatment of Adolescent Substance Use Disorders into the Mainstream of Healthcare Quality Improvement.

- Work to ensure that the 51 quality measures within the ACA are expanded to include children- and youth-specific substance use (and mental health) measures. So as not to re-invent the wheel, adopt from the list TRI has scientifically generated.
- Work to ensure that CHIPRA measures are expanded to include substance use (and mental health) measures. So as not to re-invent the wheel, adopt from the list TRI has scientifically generated.
- Provide consumers and other stakeholders with comparative information that is important to them as they choose among SAT programs to maximize the chance of achieving a positive outcome for a teenager.
- Provide funding for supervision and coaching in service settings to improve implementation of evidence-based adolescent interventions.
- Increase the investment in implementation and implementation research to make effective use of evidence-based interventions to better understand what interventions can reach large number of people, be adopted by different settings, be implemented with fidelity by different types of staff, and produce lasting effects at reasonable cost.
- Incentivize providers who deliver high quality services and implement evidence-based practices, treatments, and assessments.

If we do our part within this *Paving the Way* blueprint, increasing the quality and transparency in adolescent substance abuse treatment is within our reach. To summarize, we can pave the way to change when we work together to: ensure that the ACA and CHIPRA quality measures address adolescent substance abuse, provide consumers and other stakeholders with comparative SAT quality information, garner funding for technical assistance and capacity building so that treatment providers have the tools that they need to improve quality, and incentivize high quality service delivery.

comparative information on the quality of SAT. TRI has developed a transportable protocol to measure the quality of SAT. This protocol includes a full list of those broad principals and discrete practices (all with operationalized definitions) associated with positive outcomes among substance-abusing teens. This carefully constructed listing based on research findings and expert consensus comes to life with instrumentation to measure the availability and receipt of these quality practices from the program director's perspective, from an audit of actual program data and materials, and from the adolescent patient's report. A standardized scoring protocol using these data results in quality ratings. Finally, this information is displayed in a web-based Consumer Guide to Adolescent Substance Abuse Treatment using a recognizable and intuitive format. This kind of consumer information can immediately inform and direct an individual consumer's choice, create greater efficiency within healthcare, and increase the chances that a young person arrives at an appropriate treatment door at an earlier stage in their disease. Over time, receipt of

treatment that is related to the patient's problems/needs and is of higher quality should result in more success and ultimately less treatment and associated costs. The pipeline to adult services will have been narrowed. At another level, when performance is accurately measured and scores specific to each EBP are reported, programs can advocate for dollars to support EBPs they cannot offer due to budget constraints, and purchasers can see areas where funding limits should be reconsidered.

INNOVATIVE APPROACHES TO ADOLESCENT CONTINUING CARE

Research from 29 unique treatment samples (yielding 489 effect size estimates) is clear: adolescents exhibit significant reductions in substance use shortly after the end of treatment [117]. Observed reductions are strongest for those youth completing treatment and for programs that provide quality treatment and implement evidence-based practices well. Family therapy and multi-service packages yield greater reductions in overall substance use than most other types of treatment. Despite the fact that treatment works, gains significantly diminish post-treatment: generally within 3-6 months after care, between 66% – 79% of youth return to substance use [128-130]. For youth with co-morbid conditions, median survival time to relapse (i.e., first use after 7 days of non-use) is just 19 days or slightly under 3 weeks [131]. When relapse occurs, youth typically return to the original treatment program and receive the same treatment. In fairness to treatment, the services that are offered at one particular point in time should not be expected to last on their own forever. Driven by research supporting the view that addiction is similar to other chronic conditions (e.g., asthma, hypertension, Type-II diabetes), continuing care and monitoring are needed to sustain treatment gains [15, 16].

For adolescents, continuing care in programs or services with a youth development focus can address post-treatment environmental (e.g., lack of recovery support, poor parenting) and developmental (e.g., getting a driver's license) factors that often influence relapse and the progression of substance involvement over time [22]. It can also include skill and competency development, a hallmark of youth development programs. These skills and competencies can compete with the risks to return to drug use, and to drug use itself. In fact, there is a growing literature illustrating the protective effect of continuing care on longer-term rates of abstinence among those who receive it [132, 133].

For adolescents, there are three approaches to the traditional continuing care paradigm (e.g., step-down treatment) that have yet to truly penetrate the field: recovery high schools (followed by collegiate recovery services including sober college housing), youth development programs such as Adolescent Community Reinforcement Approach (A-CRA) and Alternative Peer Groups (APG), and technology check-ins. Each can help youth with different challenges and needs, and can help in different ways; and all can substantially add to the sparse continuing care that is currently in place.

Emerging research indicates that attending a recovery school for at least three months enabled students to maintain sobriety for an average of eight times longer than before they attended a sober school. In addition, a decrease in negative feelings, problems with the law, and urge to use, as well as an increased interest in school, work, family and friends were documented [134]. The positive outcomes of sobriety and abstinence and staying in school: fewer arrests, fewer out-of-home placements, and fewer re-admissions to expensive levels of care. We know there are clear cost-savings of a continuum of care, but what about potential revenue? What would happen if kids stayed clean and stayed in school and graduated? In addition to the human capital that results from high school graduation, it is estimated that if we could cut the Pennsylvania drop-out rate in half, Pennsylvania would see $132 million dollars in increased earnings, $97 million in increased spending, $36 million dollars in increased investments, $8.2 million in increased auto sales, and $15 million in tax revenue [135]. In other words, continuing care after treatment is not only good for an individual, continuing care after treatment can be good for the economy.

Continuing care through youth development is realized through Alternative Peer Groups (APG) [136] and the Adolescent Community Reinforcement Approach (A-CRA) [137]. Both approaches recognize that for recovery to have a chance, recovery has to be fun and developmentally appropriate. Both approaches also understand that peer relationships are as important to recovery as they are to the initiation and continued support of AOD use. Continuing care through youth development includes skill building activities that are engaging, challenging and focus on how to have fun without the use of AOD. They also incorporate active youth participation, empower youth to develop competencies, promote positive peer relationships and improved relationships with family, and use real life opportunities for learning. The focus on youth development cannot be underestimated given the importance of peer group influences and the beginning of identity development, key issues within this developmental period. Self-identification as a teenager with skills rather than as an addict with deficits is key for healthy living and a positive sense of self. A-CRA has also been paired with Assertive Continuing Care (ACC) [138, 139] wherein linkages to continuing care are shifted from the youth to a case manager and support services for continuing care participation provided. While all report positive outcomes, ACC has only been examined post-residential care.

Finally, the use of technology as a continuing care approach with adolescents has received little attention in the literature despite the prominence of technology in an adolescent's life. One proof of concept showed acceptability and feasibility [140] but this is a wide open and necessary area for development. McKay et al.'s telephone follow-ups [141], Dennis and Scott's recovery check-ups [142], and Cacciola et al.'s clinical monitoring [143] should be reviewed for possible adaptation and examination for the relapse prevention arsenal called continuing care. Each of these individual approaches would fit well (and complement one another as well as the other practices and services discussed throughout this paper) in a Recovery Oriented System of Care (ROSC). ROSCs are coordinated, person-centered, and flexible continuum of care networks comprised of community-based services and supports in prevention, early intervention, treatment, and continuing care. By design, they address the full spectrum of substance use problems, provide options for informed decisions regarding care, and shift treatment's focus from acute care to the long term management of recovery.

A Note on Co-Morbidity

Whether reviewing epidemiological or clinically based study results, one finding is universal: psychopathology, trauma, and substance use disorders (SUD) commonly co-occur in adolescence [8, 17, 72, 148-150]. Consequently, recognizing mental health and/or trauma symptomatology followed by a referral for a diagnostic evaluation is the first step in integrating care and improving outcome for these complex conditions. Inter-agency working arrangements between substance abuse and mental health providers is needed to minimize wait time for initial appointments, integrate and/or coordinate care if indicated, and reduce single-focused treatment that typically occurs within each system's silo (see Appendix A for a list of mental health quality indicators that should be available within a substance abuse treatment program).

PAVING THE WAY:
Utilize Continuing Care Approaches to Sustain Treatment Gains

- **Identifying Potential Dollars for Continuing Care:** Work with the oversight committee (identified in the early intervention section) to re-allocate a portion of identified dollars to youth development based continuing care models.
- **Funding Continuing Care:** Work to: 1) increase the proportion of health insurance plans providing coverage for treatment of adolescent substance use disorders at parity with services provided for other chronic diseases; and 2) increase budgetary support for treatments that include a strong focus on recovery support and relapse prevention.
- **Continuing Care through Youth Development, A-CRA, and APGs:** Identify and map youth development programs in a target geographical area. They can then be used as stand-alone or adjunct continuing care approaches embedded within A-CRA and APG approaches.
- **Continuing Care through Technology:** Explore the role of technology in the delivery of continuing care with adolescents. While modification of adult models can be explored, work with young people in recovery to identify what would resonate with youth and develop those tools accordingly.
- **Continuing Care through Recovery High Schools:** Work to address the financing mechanisms by having educational dollars follow the child, addressing funding based on enrollment (a Catch-22 since most recovery schools or programs have limited numbers of students by design and there is no timetable as to when a student will arrive or leave), tackling the potential problems if an educational classification were to be denoted for youth in recovery so special education dollars could be allotted (e.g., required recovery school attendance by youth who don't want to be there, stigma).
- **Continuing Care through Collegiate Recovery:** Work to establish collegiate recovery communities through the auspices of the US Departments of Education and Health & Human Services: 1) to facilitate change in the drinking culture on college campuses; and 2) provide safehavens for recovering college students. With a 4% relapse rate per semester within the Collegiate Recovery Community at Texas Tech University [144], a model exists that can be used by others in building other collegiate recovery communities.
- **Making Continuing Care a Part of Standard Care:** Work to broaden the understanding of SUDs to include multiple episodes of care and ongoing recovery management support as a standard of care. Adapt Recovery Oriented Systems of Care (ROSC) principles for teenagers and work to initially have recovery become an ongoing part of the treatment discussion. This can then be followed by the transformation of the treatment system to a recovery informed and supporting treatment system.

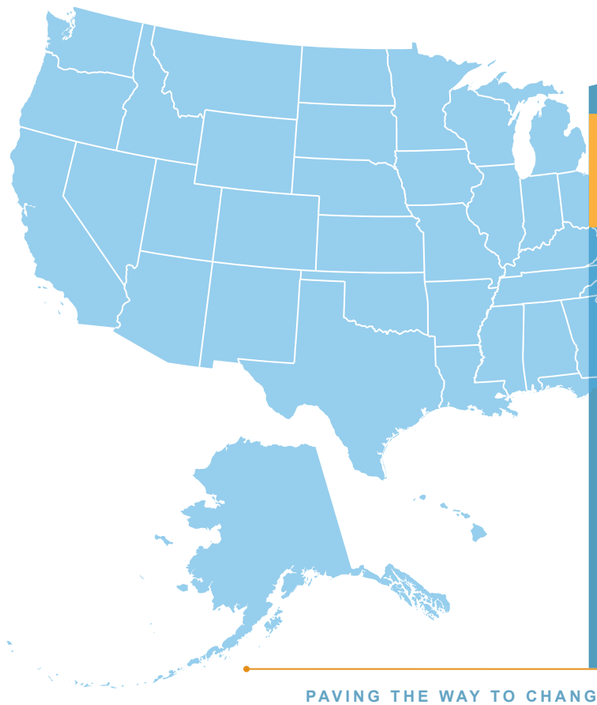
If we do our part within this *Paving the Way* blueprint, having a variety of continuing care options for each youth leaving treatment is within our reach. To summarize, we can pave the way to change when we work together to: educate funders about the importance of continuing care, address the financing issues associated with continuing care, and address program-specific barriers for each continuing care approach. We can also pave the way to change when we work together to educate others about the ROSC model. This model provides a framework for recovery support services (continuing care) within the needed shift from an acute care model to one used in other chronic conditions [145-147].

PART 4:
An Approach to Financing the System

Financing the system deserves a paper in its own right, as no single plan will work for all state systems. However, we attempt to lay out some challenges and opportunities here for further review and advocacy efforts.

While there are a variety of funding streams that could be tapped or reorganized to better address adolescent substance abuse, individual states (and advocates for adolescents) must first understand their financial portfolio that is (or could be available) for such. To do this, Cavanaugh [151] describes "financial mapping", a process of identifying public funds that are expended on a yearly basis to address an issue. A comprehensive scan of resources including those that are available but are un-or under-utilized begins the process.

Spending and utilization practices are then identified across agencies and funding streams. The results provide an x-ray of the system (in this case resources directed at addressing AOD use, abuse, dependence) for realignment of funding streams and structures. The work culminates in a comprehensive financial plan that effectively and efficiently coordinates funds to assure a continuum of care. With leadership, legislative and judicial support, and trust and buy-in from all agencies involved, financial mapping has the ability to not only improve access and expand service capacity but to also address gaps in the continuum of services. If done well, it can simplify the contracting process, improve accountability, promote common outcomes, and reduce duplication of services.



PAVING THE WAY:
Challenge States to Perform Financial Mapping

- Develop an Oversight Committee to address financing issues by identifying all potential funding streams and identifying where in a state's portfolio dollars could be diverted (over and above Block Grant Dollars).
- Identify real (and potential) cost-savings and develop policies to re-allocate those dollars for early intervention.

CONCLUSION

We are at a watershed moment in the substance abuse field. Treatment and policies are poised to be positively transformed in the coming years by both the current state of scientific knowledge and the legislative changes to the healthcare system. Public awareness about addiction and mental illness is growing, legislative advances have brought us ever closer to parity and integrated care, and the research base is expanding so that we can better address the social and biological determinants of these disorders. The necessary elements for change are now in place, and with proper alignment and leveraging of these forces, there is an enormous opportunity to have a significant impact on the way in which addiction is perceived and managed in our society.

But such systemic change can only be achieved through coordinated and multifaceted efforts. And as we have learned from other previously stigmatized diseases, the role of advocacy in driving change is critical. This report has outlined the challenges that our field must address in order to quell the tide of adolescent substance abuse in this country. The changes that are needed will not be simple. They will not be quick. They will require coordinated and effective advocacy efforts. But they are possible — if we come together to demand the change that our kids deserve. This report is meant to be a roadmap to guide our collective actions. We hope that you will reach out to your colleagues at other organizations to create tactical plans for achieving the *Paving the Way* priorities. We hope that you will make collaboration a priority. We, as advocates, have varied and powerful resources to bring to bear. We are researchers, families, legislators, people in recovery, clinicians, educators and friends. Together, we can create the change that is needed, and that will lead to important and sustained changes in the way care is delivered to adolescents and young adults who are at risk for, who have abused, and who are recovering from substance use.

Shaping the future for this vulnerable population is in our hands and our kids are counting on us.

Shaping the future for this vulnerable population is in our hands and our kids are COUNTING ON US.

APPENDIX A:

KEY FEATURES AND COMPONENTS OF QUALITY ADOLESCENT DRUG TREATMENT | *Treatment Research Institute*

KF 1: Assessment

1. In its assessment process, does the program use either a standardized substance abuse instrument or a structured clinical interview?
2. Does the program have criteria to determine treatment eligibility and level of care?
3. Does the program conduct a comprehensive initial assessment that identifies problems as well as assets, interests and resources using either a standardized assessment tool or a structured clinical interview?
4. Does the program have procedures to ensure rapid service provision?
5. Does the program reassess clients throughout the course of treatment to monitor progress and guide treatment?

KF 2: Attention to Mental Health

6. In its assessment process, does the program use either a standardized mental health instrument(s) or a structured clinical interview that covers symptoms and behaviors of common co-occurring disorders?
7. Does the program provide mental health diagnostic evaluation onsite or through referral if indicated?
8. Does the program have procedures to ensure rapid mental health service provision?
9. Does the program specify that the treatment plan addresses mental health issues when indicated?
10. Does the program provide clients with mental health services (including medication) onsite or coordinates such care with community mental health providers?
11. Does the program reassess clients' mental health status and treatment compliance throughout the course of treatment to monitor progress and guide treatment?

KF 3: Comprehensive Integrated Treatment

12. Does the program address physical health issues by providing medical services either onsite or by referral?
13. Does the program provide testing, counseling, and education for infectious diseases and sexual health either onsite or by referral?
14. Does the program address educational/vocational needs of in-school and out-of-school youth by coordinating care with the client's home school system and providing educational/vocational services either onsite or by referral?
15. For clients involved with the juvenile justice system, does the program maintain contact and coordinate care with juvenile justice officials and have policies in place to protect the rights of clients?
16. Does the program facilitate connections with prosocial, recovery oriented community organizations, mentors, activities and alternative peer groups during treatment?
17. Does the program address 'other' addictive behaviors (e.g., gambling, sex/pornography, gaming) including tobacco use?
18. Does the program assess and continue to monitor clients for trauma and other serious stressors (e.g., family/residential instability, victimization, crime, grief and loss) and provide services either on-site or through referral?
19. Does the program go beyond problem-focused services by also identifying and building on the client's strengths and protective factors to promote resiliency?

KF 4: Family Involvement in Treatment

20. Does the program conduct an assessment of family functioning?
21. Does the program refer parents and household members with alcohol or other drug problems, serious mental health problems, or domestic violence issues to treatment?
22. Does the program provide family therapy?
23. Does the program provide and support opportunities for the family to obtain information about and have input in decisions regarding the treatment, recovery, and resiliency plans for their child?
24. Does the program have procedures in place to maintain contact with families and provide educational and multi-family support groups so as to keep families engaged in their child's treatment?
25. Does the program involve family members of adolescent substance abusers in programming or planning (e.g., through Board of Director Involvement, Family Advisory Panel, Consumer Satisfaction Surveys)?

KF 5: Developmentally Informed Programming

26. Are adolescent clients treated only with other adolescents, as opposed to being integrated with adult clients?
27. Does the program vary the way in which information is presented, skills are taught, and therapy is conducted (e.g., concrete content, role-plays) given the ages, maturity and developmental levels of clients?
28. Does the program include adolescent-specific courses, recreational programming, or other features of particular interest to adolescents?
29. Does the program provide and support opportunities for clients to have input in decisions regarding their treatment, recovery and personal goals?
30. Does the program place a client's "disruptive" behavior in a developmental context (e.g., limit testing, moodiness, rebelliousness, impulsivity are common) when determining how to address the behavior and help a client learn from mistakes?
31. Does the program acknowledge and address the developmental tasks of adolescence (e.g., peer group influences, identity formation, autonomy)?

KF 6: Engage and Retain Adolescents in Treatment

32. Does the program have procedures to reduce barriers to attendance?
33. Does the program emphasize building a therapeutic alliance between staff and clients to engage and retain the client?
34. Does the program utilize motivational enhancement techniques initially and throughout the course of treatment to engage and retain clients?
35. Does the program incorporate contingent positive reinforcement or other incentives to engage adolescents so that they attend and participate in treatment?
36. Does the program have outreach and reengagement procedures for missed treatment sessions and poor attendance?

KF 7: Staff Qualifications and Training

37. Does the clinical staff have training in adolescent development?
38. Does at least one clinical supervisor possess a minimum of a master's degree in a relevant field?
39. Does the program provide direct service staff with ongoing supervision, feedback and evaluation regarding their clinical skills?
40. Does the program provide ongoing in-service training, and reimbursement or paid leave for direct service staff and supervisors to obtain training?
41. Does the program train counselors in case management or have at least one designated case manager?

42. Does the program have at least one master's or higher degreed clinical staff trained in mental health or co-occurring disorders?
43. Does the program have at least one master's degreed clinical staff trained in family therapy?
44. Does the program have a medical professional onsite (i.e., physician, registered nurse, nurse practitioner, or physician assistant)?

KF 8: Person-First (Culturally Competent) Treatment

45. Does the program consider the values, worldviews and practices of the client's culture, gender, and sexual orientation when implementing the treatment plan?
46. Does the program provide clients with separate gender-specific group sessions and curricula for some topics?
47. Is the program designed to meet the needs of lesbian, gay, bisexual, transgendered, and questioning youth (LGBTQ)?
48. Does the program facilitate connections to community groups that align with clients' and families' culture, gender, and sexual orientation?
49. Does the program have policies and procedures to ensure the emotional and physical safety of youth, to promote respect of difference, and to prevent and address bullying, victimization, and boundary violations from other clients and staff?
50. Does the program provide cultural competency, sexual harassment, and patient/therapist boundary training to their staff?

KF 9: Continuing Care and Recovery Supports

51. Does the program provide relapse prevention services?
52. Does the program educate clients and their families about continuing care and recovery supports and focus on them throughout the course of treatment?
53. Does the program provide an individualized transition period of tapered treatment to support recovery?
54. Does the program create a comprehensive continuing care and recovery support plan covering an extended period of time after treatment is completed?
55. Does the program link clients with relevant community services (e.g., adolescent 12 Step meetings, alternative peer groups, mentoring resources) prior to discharge to promote post-treatment service engagement and ongoing recovery?
56. Does the program link families with relevant community services (e.g., parent support group) prior to discharge to promote ongoing support and recovery for their child?
57. When treatment is completed, does the program monitor clients with periodic clinical checkups and maintain an ongoing connection with clients to support recovery, service referral, and re-engagement in treatment when indicated?

KF 10: Program Evaluation

58. Does the program have a comprehensive electronic medical record?
59. Does the program analyze its internal program performance indicators (e.g., time in treatment, type of discharge, during treatment substance use, client satisfaction) to measure the effectiveness of its treatment services?
60. Does the program collect and analyze its own data related to client effectiveness or outcome (e.g., post-discharge outcomes for internal or external reports)?
61. Does the program have others independently conduct formal treatment effectiveness or outcomes evaluations?
62. Has the program used program performance or outcomes data to improve treatment delivery?

APPENDIX B:

EFFECTIVE AND PROMISING TREATMENTS FOR ADOLESCENT SUBSTANCE ABUSE

1. Adolescent Community Reinforcement Approach
2. Adolescent Portable Therapy
3. Brief Strategic Family Therapy (BSFT)
4. Cognitive Behavioral Therapy (CBT)
5. Dialectical Behavior Therapy
6. Family Behavior Therapy
7. Family Empowerment Intervention (FEI)
8. Family Support Network
9. Functional Family Therapy (FFT)
10. Matrix Program
11. Motivational Enhancement Therapy (MET)
12. Multidimensional Family Therapy (MDFT)
13. Multisystemic Therapy (MST)
14. Parenting with Love and Limits (PLL)
15. Phoenix House Academy
16. Relapse Prevention Therapy
17. Residential Student Assistance Program (RSAP)
18. Seeking Safety
19. Seven Challenges
20. Teen Intervene
21. Trauma-Informed CBT

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ACKNOWLEDGMENTS:

This work was made possible through the generous support of the Bridge Foundation and the NIDA Parent's Translational Research Center (grant #P50-DA02784). The authors also wish to thank the following for sharing their time and expertise: A. Thomas McLellan, Mady Chalk, Keli McLoyd, Theodore Caputi, and Debra Christoffel.

And, most importantly, the authors wish to acknowledge all the excellent adolescent treatment providers, advocates and families who are working every day to Pave the Way to Change and to achieve the promise of a better system of care for our children.

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