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Problem Identification and Community Assessment of Youth Substance Use Treatment Needs for Bexar County, Texas

August 2014

NeurobehavioralResearch Laboratory and Clinic

RHP6 LearningCollaborative

SACADA
The San Antonio Council on Alcohol and Drug Abuse

Problem Identification and Community Assessment of Youth Substance Use Treatment Needs for Bexar County, Texas

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INTRODUCTION

In December 2012, the Texas Health and Human Services Commission (HHSC) received federal approval of a waiver to provide incentive payments for health care improvements and to direct more funding to hospitals that serve large numbers of uninsured patients. The waiver, issued by the state's Delivery System Reform Incentive Payment Pool (DSRIP), was offered to hospitals and other providers for investments in delivery system reforms and programs that increase access to health care, improve the quality of care, and enhance the health of patients and families. This community Needs Assessment was developed by personnel from the University of Texas Health Science Center at San Antonio Neurobiological Research Laboratory and Clinic (NRLC) to meet the milestone put forth by the Center for Medicare & Medicaid Services (CMS).

The goal of this Needs Assessment is to provide support for the NRLC and the University of Texas Health Science Center at San Antonio to design and implement an evidence-based treatment program for uninsured or underinsured juveniles with substance use disorder in Bexar County. This Needs Assessment will document high rates of youth substance use in Bexar County and San Antonio. It will also show that there are limited treatment resources for youth substance use, especially for the uninsured or underinsured.

The need for improved healthcare infrastructure will continue to increase as the population is expected to grow and more Texans gain coverage under the Affordable Care Act. The opportunity to implement transformative projects through the waiver funding will help Regional Healthcare Partnership (RHP) Region 6 address the needs of Bexar County.

APPROACH

The purpose of this Needs Assessment was to document the current needs for youth substance use treatment in Bexar County. This report outlines demographics, substance use patterns, correlates and consequences of youth substance use, and available substance use treatment programs within the target region (Bexar County).

A multi-level analysis approach was used to construct this Needs Assessment, which incorporated data from a range of sources.

- First, we reviewed demographic data from publically available data systems (e.g. U.S. Census Bureau) regarding the population that will be served.
- Next, we collected information concerning youth substance use and available substance use treatment programs in Bexar County. Some of these data came from publically accessible data systems, such as the Texas School Survey of Drug and Alcohol Use and Youth Risk Behavior Survey. In addition, other data were requested from organization such as the University Health System, Texas Department of State Health Services, and the Uniform Crime Reporting Program at the Texas Department of Public Safety.
- Finally, to provide further information on treatment needs, we conducted focus groups and surveys with 40 parents whose children are currently in substance use treatment. These focus groups and surveys provided more information about the gaps in services for parents of youth involved in substance use among currently-available programs. Data from these in-person assessments are cited throughout this document as NRLC, 2014.

Data across these sources are presented with interpretation demonstrating the needs of our targeted population (low-income youth with substance use diagnoses). These data justify the selection of each component in our pending treatment program, which will help meet the need for more treatment services for youth substance users.

To acquire secondary data for this Needs Assessment, the NRLC partnered with the San Antonio Coalition on Alcohol and Drugs (SACADA). SACADA is a non-profit organization founded over 50 years ago that has worked to educate the public about risks associated with tobacco, alcohol, marijuana, prescription drugs, and other substance use.

EXECUTIVE SUMMARY

Key Findings on Treatment Location Description

- Bexar County is the 4th largest county in Texas and consists of 27 cities and municipalities. San Antonio is the county seat.
- Bexar County is the geographic center of the San Antonio Metropolitan Statistical Area.
- Bexar County is the most heavily populated county in Regional Healthcare Partnership (RHP) Region 6 and has the largest population of individuals under 18 years of age.
- Bexar County has the greatest proportion of individuals under 18 who are uninsured or enrolled in Medicaid of RHP 6 counties.

Key Findings on Bexar County Demographic Characteristics

- In Bexar County and San Antonio, 70% of youth in Bexar identify as Hispanic or Latino. Hispanic or Latino youth come from a range of countries of origin.
- Hispanic or Latino youth are more likely to be uninsured and/or live in poverty.
- Bexar County has high percentages of individuals who live with incomes below the poverty line. Youth, Hispanic families, families with children, and families with children and female head-of-households were more likely to live in poverty.

Key Findings on Youth Substance Use

- Bexar County would benefit from increased data collection on youth substance use.
- Bexar County youth report levels of substance use that are similar to or higher than state and national averages.
- Youth substance use has decreased slightly over the last 10 years but remains a public health concern.
- Alcohol and marijuana are the most commonly used substances.
- Despite demographic differences, the two school districts with available data on youth substance use reported similar rates of use. Thus, these data may be generalizable to Bexar County as a whole.

Key Findings on the Demographics of Youth Substance Use

- Substance use differs slightly between gender, ethnic, and age groups. Across these demographic groups, however, substance use is high.
- Substance use is higher among single-parent families. 38% of Bexar County youth live in single-parent households.
- About 60% to 70% of Bexar County youth believe that a least a few of their friends use alcohol and marijuana. Youth who believe their friends engage in substance use are more likely to use substances themselves.
- Over 20% of Bexar County youth believe that alcohol and marijuana are not very dangerous or not at all dangerous. Youth who perceive that drugs and alcohol are not dangerous are more likely to use substances.

Key Findings on Risky Behavior Associated with Use

- Over 15% of youth report driving under the influence of alcohol and marijuana during high school.
- Nearly 25% of sexually-active youth report using drugs or alcohol before their last instance of sexual intercourse.
- Texas reports rates of sexually transmitted diseases (STDs) similar to or above national averages. Rates of syphilis infections are especially high.

Key Findings on Consequences of Youth Substance Use

- Bexar County youth received a high number of substance-related diagnoses in local medical care centers. Many diagnoses were received in emergency care, juvenile justice,

and primary care facilities. Most youth who received substance-related diagnoses were uninsured and were discharged to their home.
- Nearly 1700 Bexar County youth were arrested in 2012 for drug and alcohol offenses.
- Bexar County youth who engage in substance use report more discipline problems and lower grades in school than youth who do not engage in substance use.

Key Findings on Availability and Use of Youth Substance Use Treatment Programs

- There are currently 9 substance use treatment programs in Bexar County. Most have small maximum patient loads and few include parenting educational or therapy components.
- These treatment programs use a range of therapies. More programs that use Motivational Enhancement Therapy, parenting components, and continued care are needed.
- Most youth who received treatment form programs funded by the Texas Department of State Health Services (DSHS) attended programs outside of Bexar County.
- The majority of youth who receive treatment through DSHS-funded programs are referred through the juvenile justice system.

Key Findings on Parent Reports of Treatment Needs

- Few parents reported receiving parenting tips as part of their child's substance use treatment or outside of treatment through parenting classes, and few reported learning parenting tips in treatment or classes that were helpful.
- Many parents emphasized communication, unconditional acceptance, and shared activities as methods to reduce their child's substance use.
- Few parents reported effective monitoring or discipline techniques to reduce their child's substance use.
- Most parents reported that they would find parenting tips received through text messages helpful.

Conclusion

Bexar County has a large population under 18 and many of these youth are Hispanic, uninsured, enrolled in Medicaid, and/or live in poverty. Rates of substance use in Bexar County are similar to or higher than state and national averages. Substance use is related to several demographic variables, perceptions concerning substance use, and serious consequences such as driving under the influence, sexual health, and academic outcomes.

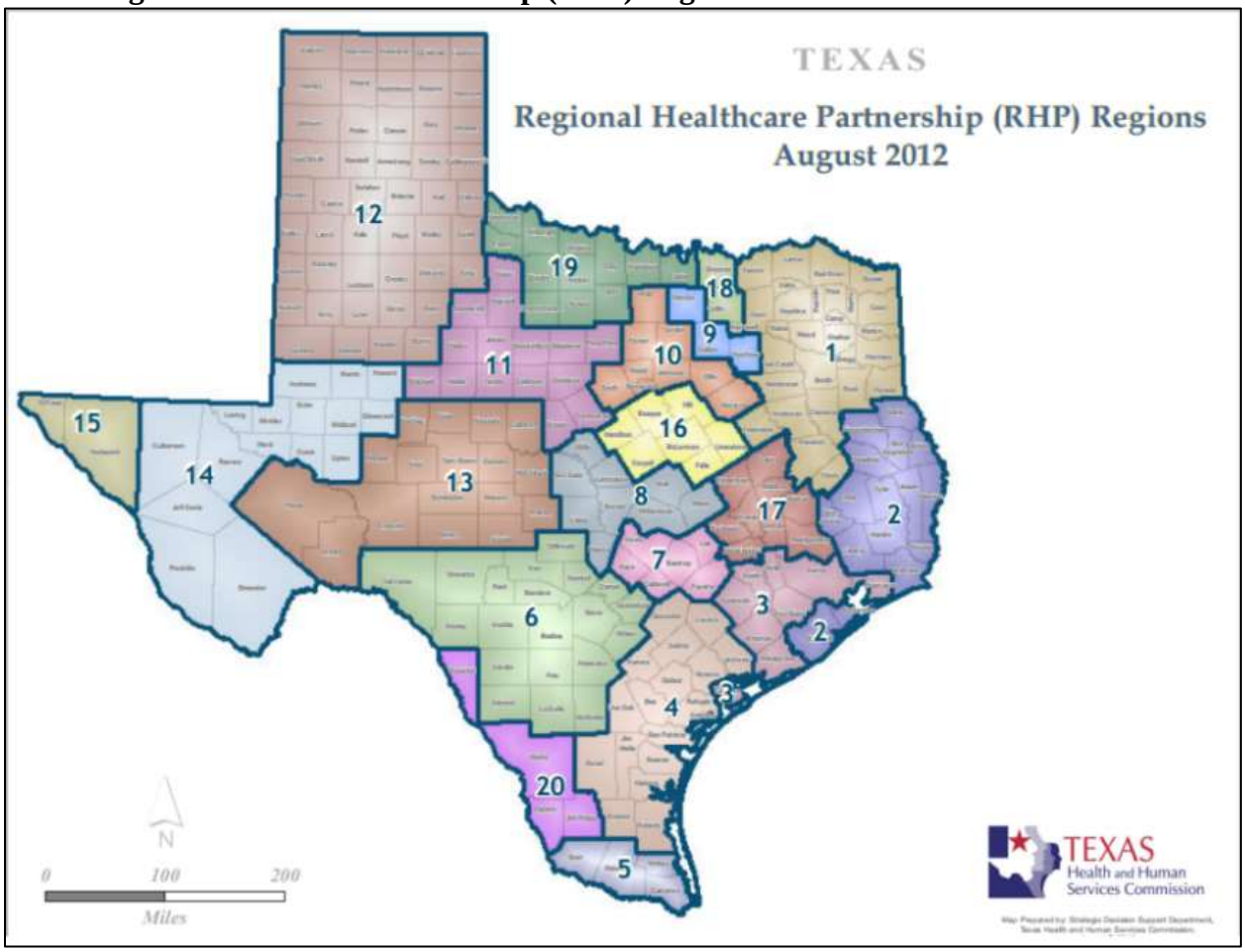
These data on youth substance use illustrate the need for more evidence-based treatment programs. Bexar County has few substance use treatment programs for youth, and among those, even fewer treatments include parenting components or aftercare. Together, this Needs Assessment suggests that Bexar County would benefit from a youth substance use treatment program that (a) recruits primarily low-income, Medicaid, and Hispanic youth, (b) includes evidence-based treatments such as Motivational Enhancement Therapy, and (c) includes parenting and aftercare components.

Geographical Area

Texas Regional Health Care Partnerships

The State of Texas has 20 separate Regional Health Care Partnerships (RHPs). These RHPs are locally-developed confederations that fund the state share of all waiver* payments in a partnership. Each RHP developed a plan to identify participating partners and community needs and accepted project proposals that aimed to improve access, quality, and cost-effectiveness of care coordination. This Needs Assessment was conducted as a component of the RHP 6 (shown in green in the lower center of Figure 1 below) waiver program and focused on Bexar County to characterize youth substance use, access to substance use treatment, and available substance use treatment resources.

Figure 1. Regional Healthcare Partnership (RHP) Regions



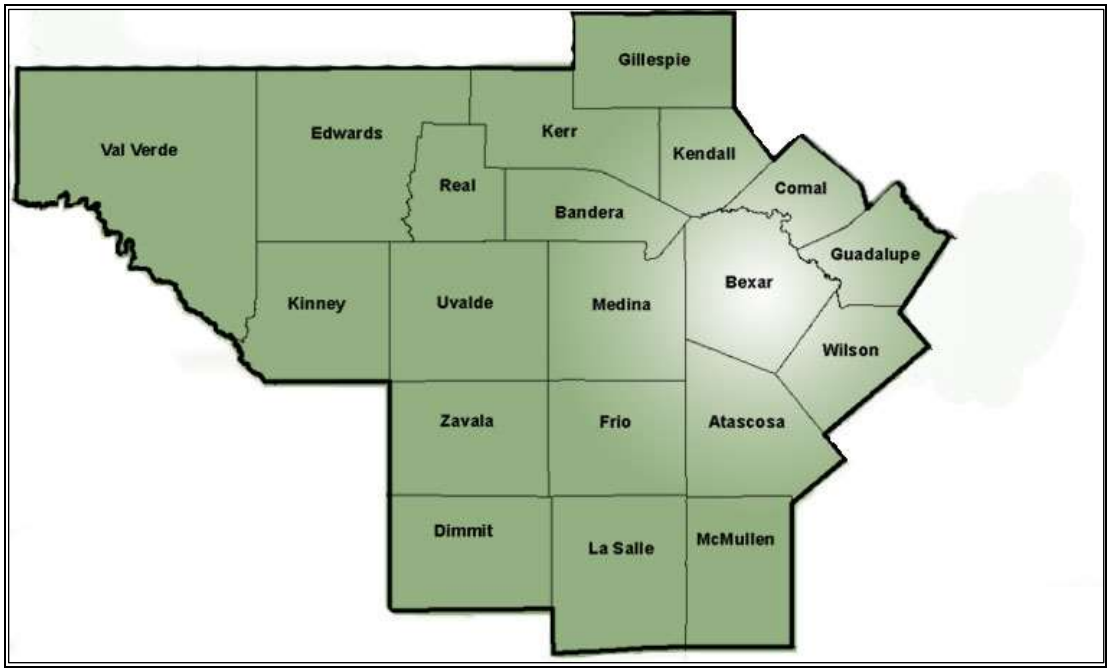
* A waiver under section 1115 of Social Security Act that allows Center for Medicare and Medicaid Services and states more flexibility in designing programs to ensure delivery of Medicaid services.

Regional Health Care Partnership 6

RHP 6 is anchored by the University Health System in San Antonio, Texas. Owned by the people of Bexar County, University Health System (George Hernandez, Jr. President and CEO) is a nationally recognized academic medical center, in partnership with The University of Texas Health Science Center School of Medicine.

RHP 6 is large and geographically diverse. It encompasses 24,734 square miles and includes 20 counties: Atascosa, Bandera, Bexar, Comal, Dimmit, Edwards, Frio, Gillespie, Guadalupe, Kendall, Kerr, Kinney, La Salle, McMullen, Medina, Real, Uvalde, Val Verde, Wilson, and Zavala (Figure 2). This region has 2.3 million residents.

Figure 2. Counties within RHP 6



Treatment Location Description

Results of this Needs Assessment will inform the development of a treatment program in Bexar County to fill identified service gaps. The treatment will take place at the UT Health Science Center at San Antonio. This location is appropriate for the new treatment program for many reasons. First, Bexar County has the largest population of RHP 6 (Table 1) and is the 4th largest county in Texas. Bexar County's population increased 6.0% from 2010-2013, compared to a 5.2% increase for the state of Texas and 2.4% for the nation overall. Thus, Bexar County has a growth rate that is significantly above average. Bexar County's large population suggests a high need for additional treatment programs.

Second, Bexar County absorbs much of the medical and mental health care needs of the surrounding counties: Atascosa, Comal, Guadalupe, Kendall, Medina, and Wilson Counties (bolded within Table 1, below). As stated in the RHP 6 Community Needs Assessment (http://www.texasrhp6.com/wp-content/uploads/2012/09/Section-III-Needs-Assessment-Report_updated-0926.pdf), Bexar County absorbs medical and mental health care needs of these counties because it has more hospitals, health providers, and community resources. A significant number of people in these surrounding counties travel to Bexar County for treatment, making it a logical choice for a centrally-located, accessible substance use program.

Third, the UT Health Science Center within Bexar County is an appropriate location for a new treatment program because another waiver project in RHP 6, the Hill Country MHMR Center, will serve many of the other counties: Val Verde, Edwards, Kinney, Real, Uvalde, Kerr, Bandera, Medina, and Gillespie. The Hill Country MHMR Center will serve individuals with a range of physical health conditions, mental health diagnoses, and cognitive disabilities. Therefore, the current Needs Assessment and resulting treatment program will not focus on this already-served area.

Fourth, the demographic characteristics of Bexar County make the UT Health Science Center a logical choice for the treatment program. One goal of the waiver is to better meet the health care needs of underserved populations. Bexar County has a high number of total youth (Table 1) as well as uninsured and low-income youth. As Table 1 shows, Bexar County has the highest population under 18. Additionally, 26.3% of the Bexar County population is under 18, which is higher than the percentage across RHP 6 (23.6%). A significant portion of these youth in Bexar County (11.3%) are uninsured, which is above the national average (8.1%) and similar to the average among the other RHP 6 counties (11.7%). The counties with similarly high levels of uninsured individuals are adjacent to Bexar County (Guadalupe and Medina) or served by the Hill Country MHMR Center (Kerr, Real, Uvalde, and Val Verde). Therefore, Bexar County has a high need for treatment programs that serve youth, focusing largely on uninsured youth.

Table 1. Texas and RHP 6 County Populations

	2013 Population Estimate	Population under 18	Percent under 18 with no health insurance coverage
Texas	26,448,193	7,041,986	14.6%
Bexar	**1,817,610**	**478,797**	**11.3%**
Atascosa	**47,093**	**13,305**	**10.8%**
Bandera	20,601	3,635	13.6%
Comal	**118,480**	**27,370**	11.2%
Dimmit	10,897	3,281	13.3%
Edwards	1,884	399	6.4%
Frio	18,065	4,352	7.5%
Gillespie	25,357	4,964	14.0%
Guadalupe	**143,183**	**38,017**	**11.1%**
Kendall	**37,766**	**8,974**	**9.3%**
Kerr	49,953	9,740	15.5%
Kinney	3,586	707	12.1%
La Salle	7,369	1,520	11.8%
McMullen	764	154	0.0%
Medina	**47,399**	**11,599**	**13.0%**
Real	3,350	583	20.6%
Uvalde	26,926	7,554	16.8%
Val Verde	48,623	14,168	15.4%
Wilson	**45,418**	**11,373**	**8.4%**
Zavala	12,156	3,706	12.2%

Source: 2012 American Community Survey

RHP 6 County Medicaid Rates

Overall, the majority of youth under 19 in the RHP 6 region are enrolled in Medicaid. Table 2 shows the total enrollment, number of individuals under 19 enrolled, and the percent of individuals under 19 enrolled in Medicaid in Bexar County. We provide this information for Bexar County and other RHP 6 counties (counties surrounding Bexar County are in bold) to demonstrate the high population in Bexar County and surrounding counties relative to the rest of RHP 6.

Bexar County has by far the largest number and one of the highest percentages of children under 19 years of age enrolled in Medicaid of RHP 6 counties (Table 2). Only Comal and Guadalupe counties (both adjacent to Bexar County) have a higher percentage of Medicaid enrollees under the age of 19. However, in both counties, the actual number of individuals under 19 with Medicaid coverage is much lower than the total number in Bexar County. Thus, new treatment programs within Bexar County should also focus on including a high percent of youth on Medicaid.

Table 2. Texas and RHP 6 County Medicaid Enrollment

	Total Enrollment	Under Age 19 Enrolled	Percent Under 19 Enrolled
Texas	3,651,344	2,757,291	75.5%
Bexar	**277,082**	**203,356**	**73.4%**
Atascosa	**8,095**	**5,768**	**71.3%**
Bandera	1,876	1,294	69.0%
Comal	9,223	6,973	75.6%
Dimmit	2,700	1,798	66.6%
Edwards	277	165	59.6%
Frio	3,575	2,528	70.7%
Gillespie	2,105	1,481	70.4%
Guadalupe	**13,579**	**10,112**	**74.5%**
Kendall	**2,380**	**1,696**	**71.3%**
Kerr	5,719	4,126	72.1%
Kinney	380	246	64.7%
La Salle	1,302	856	65.7%
McMullen	36	18	50.0%
Medina	**6,157**	**4,263**	**69.2%**
Real	486	274	56.4%
Uvalde	5,575	3,928	70.5%
Val Verde	9,985	6,952	69.6%
Wilson	**4,383**	**3,045**	**69.5%**
Zavala	3,440	2,378	69.1%

Source: October 2013 Medicaid Enrollment Statistics from Texas Health and Human Services Commission.

Tables 1 and 2 demonstrate that Bexar County has a large population of youth who are uninsured and on Medicaid. These data suggest that it is important for Bexar County to sufficient services capable of servicing Medicaid and Medicaid-eligible youth with substance use issues. In the next section, we describe the demographic characteristics of Bexar County in more detail.

Bexar County Demographic Characteristics

Hispanic and Latino Population

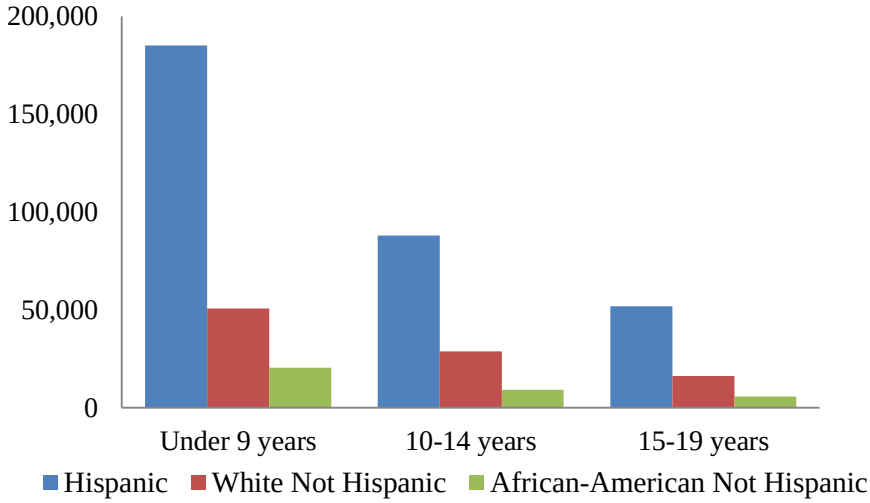
In Bexar County, most of the population identifies as Hispanic or Latino, and fewer as White Not Hispanic and Black Not Hispanic (Table 3). In comparison, only 38.4% of Texans identify as Hispanic or Latino. The percent of youth who identify as Hispanic or Latino is even larger, at 71%. As Figure 3 shows, the percent of youth who identify as Hispanic is highest in the youngest age groups, suggesting that the number of Hispanic individuals aged 10 to 18 will continue to grow.

Table 3. Demographic Characteristics

	Bexar County	Texas
Total Population	1,817,610	26,448,193
% Hispanic	59.1%	38.4%
% White	29.5%	44.0%
% Black	8.2%	12.4%

Source: 2010 & 2012 American Community Survey

Figure 3. Ethnicity by Age Group in Bexar County



Source: 2012 American Community Survey

Although Hispanic and Latinos are Bexar County's largest ethnic group, the Hispanic population is not homogeneous; country of origin has a distinct culture. As seen in Table 4, although most Hispanics and Latinos currently residing in Bexar County identify Mexico as their nation of origin, they come from a range of backgrounds.

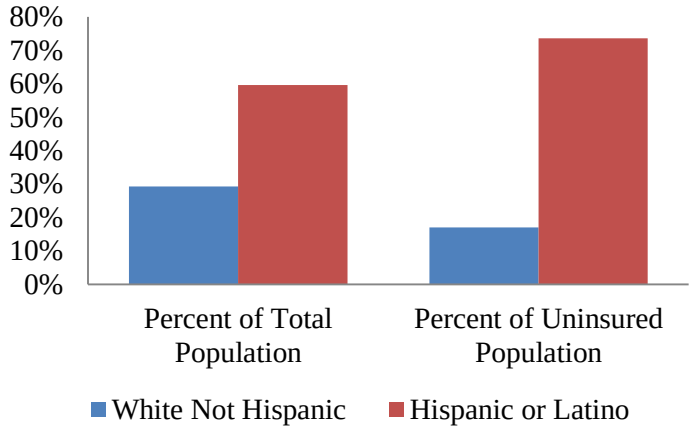
Table 4. Bexar County Hispanic Population by Country of Origin

Ethnic Population	N
Total Population	1,785,704
Not Hispanic or Latino	730,979
Hispanic or Latino	1,054,725
Mexican	948,727
Puerto Rican	20,806
Spaniard/Spanish	19,337
Central American	18,765
South American	7,730
Cuban	4,593
Dominican	1,624
Other Hispanic or Latino	33,143

Source: 2012 American Community Survey

The demographics of the Hispanic or Latino population may differ from other populations in significant ways. As shown in Figure 4, Hispanic or Latino individuals are disproportionately represented in the uninsured population of Bexar County. Whereas Hispanic or Latino individuals make up 59.1% of the total population, they are 73.6% of the uninsured population. Therefore, Hispanic or Latino youth are especially likely to be uninsured, suggesting that new treatment programs focused on serving uninsured youth should target this population.

Figure 4. Proportion of White and Hispanic Individuals in Total Population and Uninsured Population



Source: 2012 American Community Survey

Poverty Levels in Bexar County

The poverty rates in Bexar County are comparable to Texas as a whole (Table 5), suggesting that Bexar County may be similar to other RHP 6 counties in terms of socioeconomic status. As expected, given the data on the number of individuals enrolled in Medicaid (Table 2) and uninsured (Figure 4), Bexar County has high poverty rates. Poverty rates (defined at 2012 as an income of $23,283 for a family of four) are highest for youth under 18 years of age (28.2%) compared to individuals 18 to 64 years of age (16.5%) and 65 years and over (12.3%).

Families in Bexar County with Hispanic or Latino members are significantly more likely to live in poverty (21.2%) than White Not Hispanic families (4.8%). Poverty rates are also

highest for families with children under 18 and families with children under 18 with female heads of household. In Bexar County, families with children under 18 are 64% more likely to have an income below the poverty level than those without children under 18.

This information suggests that children, Hispanic families, and families with children are more likely to live in poverty, and provides further support that to best serve the Bexar County population, new treatment programs should recruit from these populations.

Table 5. Texas and Bexar County Percent of Individuals and Families with Income below Poverty Level in Past 12 Months

	Bexar County %	Texas %
All People	19.2	17.9
Under 18	28.2	25.8
All Families	15.5	14.0
Hispanic or Latino Families	21.2	23.8
White Not Hispanic Families	4.8	6.2
Families w/ Children under 18	22.6	20.7
Married couple families w/ children under 18	13.5	11.5
Families with female householder, no husband w/ children under 18	41.7	42.7

Source: 2012 American Community Survey

In summary, a large proportion of Bexar County youth identify as Hispanic or Latino; this Hispanic or Latino population comes from a range of nations of origin. Hispanic youth are more likely than other ethnic and age groups to be uninsured and live in poverty. We will focus our treatment program on adolescent substance use, targeting low-income, uninsured, and Medicaid youth.

Youth Substance Use

According to the National Institutes of Health (NIH), drug use among U.S. youth remains high and is a significant public health concern (NIH, 2014). It is estimated that 50% of youth in the United States have used an illicit drug by the time they leave high school (Johnson, O'Malley, Miech, Bachman, & Schulenberg, 2014). As shown in Table 6, approximately two-thirds of youth have used alcohol and 40% have used marijuana one or more times in their life. Alcohol and marijuana are the most commonly used substances among youth.

As a comparison, Table 6 also shows the lifetime prevalence for Bexar County and Texas. Bexar County's rates of substance use are similar to state and national averages of substance use. Given this similarity and the NIH's statement concerning youth substance use as a public health concern, it is important to examine local rates of substance use in more detail.

Table 6. Substance Use Lifetime Prevalence, Bexar County, Texas, and US 2013

	Alcohol	Marijuana	Prescription Drugs	Ecstasy	Cocaine	Methamphetamines	Heroin
US	66.2%	40.7%	17.8%	6.6%	5.5%	3.2%	2.2%
Texas	67.2%	37.5%	19.0%	8.8%	8.3%	4.8%	3.8%
Bexar County	67.5%	41.9%	19.8%	7.4%	6.4%	3.6%	1.8%

Source: 2013 Bexar County Community Health Assessment; 2013 National Youth Risk Behavior Survey

Bexar County Youth Substance Use

Our search for substance use information in Bexar County revealed a need for more comprehensive survey of drug use among area youth. We have only one means of collecting youth substance use at the county level: the Texas School Survey of Drug and Alcohol Use (http://texasschoolsurvey.org/) administered by Texas A&M University. This survey collects data about substance use among students in grades 6 through 12. When the Texas School Survey was initiated in 1988, it had a 90% participation rate among schools. Unfortunately, very few schools currently participate. Thus, we will focus on Northside Independent School District (NISD) and San Antonio Independent School District (SAISD), the two Bexar County school districts that most recently participated in the Texas School Survey, to examine youth substance use in Bexar County. NISD (grades 7 through 12) participated most recently in 2012 and SAISD (grades 7 through 9) participated most recently in 2010.

Because the data on substance use among Bexar County youth originate from local high schools, we will provide demographic information on the school districts within Bexar County. Although substance use data is only available for NISD and SAISD, showing demographic information for all districts will allow us to describe the population from which many of the participants for our program will be recruited. Furthermore, we can demonstrate that despite demographic differences between NISD and SAISD, substance use is a concern in both districts and therefore may be a concern in other districts.

Bexar County School Districts

Bexar County has 15 independent school districts that are very diverse and have a total enrollment of 308,117 (Table 7). Enrollment in Bexar County school ranges from less than 1,000 (Lackland ISD) to over 90,000 (Northside ISD). Most school districts in Bexar County report that most of their students identify as Hispanic and are economically disadvantaged. The percent of economically disadvantaged students correlates with the percent who identify as Hispanic, average SAT score, and percent who scored at or above criterion for the minimum goal for students applying to college as determined by the Academic Excellence Indicator System on the SAT or ACT. This information suggests that a large portion of the population who will be served in the newly-designed substance use program will be low-income and Hispanic or Latino.

Notably, the two districts for which we have substance use data, NISD and SAISD, are two of the three largest districts in Bexar County, with a combined enrollment of over 140,000 students. Both districts have a high percentage of students who are economically disadvantaged and Hispanic or Latino. However, there are also noticeable differences between NISD and SAISD. SAISD is the largest of a group of districts (Edgewood, Harlandale, South San Antonio, Southwest, Somerset, and Southside) where 79% to 98% of youth identify as low-income or Hispanic or Latino. These districts also report lower academic performance. In contrast, NISD is the largest district of a different group of school districts: East Central, Judson, Northeast, and Fort Sam Houston ISDs. Among these districts, 22% to 65% of their students identify as low-income or Hispanic or Latino and academic performance is relatively higher.

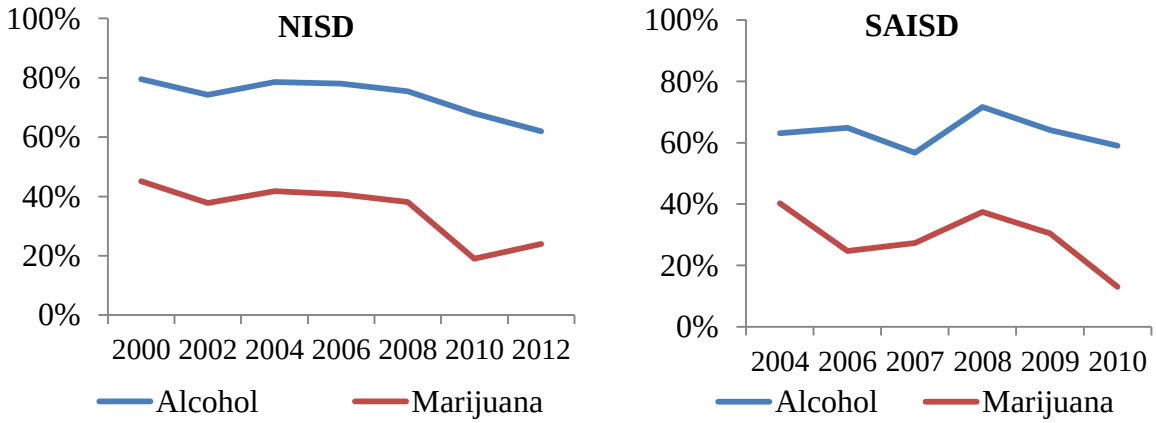
Table 7. Bexar County School Districts: Enrollment and Demographics 2010

	Total Students	Economically Disadvantaged*	% Hispanic	% White	% African American	At/Above Criterion*	Avg SAT score
San Antonio ISD	55,086	93%	90%	3%	7%	6%	833
Edgewood ISD	12,292	91%	98%	1%	1%	5%	814
Harlandale ISD	14,454	90%	96%	3%	1%	7%	864
S. San Antonio ISD	9,962	88%	96%	2%	2%	6%	834
Southwest ISD	11,455	84%	89%	7%	4%	7%	849
Somerset ISD	3,706	82%	85%	14%	1%	6%	816
Southside ISD	5,192	79%	87%	11%	2%	6%	834
East Central ISD	9,257	64%	64%	25%	10%	14%	920
Judson ISD	21,695	61%	48%	21%	28%	18%	924
Northside ISD	91,464	50%	64%	23%	8%	30%	1002
North East ISD	65,217	43%	49%	37%	9%	35%	1032
Ft Sam Houston ISD	1,471	41%	22%	45%	27%	31%	1012
Lackland ISD	934	29%	21%	50%	24%	44%	1086
Alamo Heights ISD	4,736	22%	35%	61%	2%	61%	1134
Randolph Field ISD	1,196	10%	18%	54%	22%	27%	1035

***** Defined as eligible for free lunch during 2010 school year.
****** Percent of students who scored at or above 1110 on the SAT or 24 on the 2009 ACT. The Academic Excellence Indicator System sets this criterion as the minimum goal for students applying to college.
Source: 2010 Texas Education Agency School District Profiles

Similar to national longitudinal data (NIH, 2012), substance use in Bexar County has decreased slightly over the past 10 years but remains a public health concern. Figure 5 shows the percent of youth who have used alcohol and marijuana (the most commonly used substances, see Table 6) one or more times, over the decade or more for which we have data for NISD and SAISD from the Texas School Survey. Approximately 60% of youth in each district reported alcohol use and 20% reported marijuana use. As explained above, we lack the data to compare these rates to other schools in the county. However, although the students in the two districts are demographically different (see Table 7), substance use is high in both. This suggests that substance use in districts similar to NISD and SAISD, respectively, may be high as well.

Figure 5. NISD and SAISD Lifetime Prevalence of Use



Source: 2010 Texas School Survey of Drug and Alcohol Use

Table 8 illustrates lifetime prevalence and recent use of alcohol, marijuana, and tobacco from the 2010 Texas School Survey of Drug and Alcohol Use. This is the most recent year for which data are available for NISD (grades 7 through 12) and SAISD (grades 7 through 9). The data suggest that youth substance use in both NISD and SAISD is comparable or higher than state averages. NISD reported higher substance use rates than did SAISD, although this is likely because SAISD did not include grades 10 through 12. Given differences in the ethnic, social economic, or academic composition (see Table 7), these data suggest that substance use may be higher in Bexar County schools as a whole than Texas.

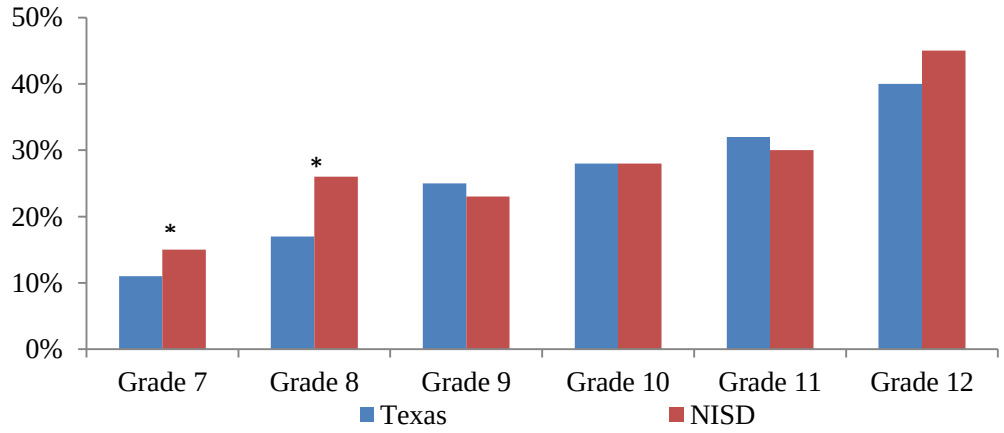
Table 8. Texas and San Antonio Youth Substance Use, 2010

	Used in Lifetime			Used in the Past Month		
	Texas	NISD	SAISD	Texas	NISD	SAISD
Alcohol	62.0%	68.0%	59.0%	29.0%	35.0%	31.0%
Marijuana	14.0%	19.0%	13.0%	5.0%	8.0%	4.0%
Tobacco	30.0%	34.0%	23.0%	12.0%	14.0%	9.0%

Source: 2010 Texas School Survey of Drug and Alcohol Use

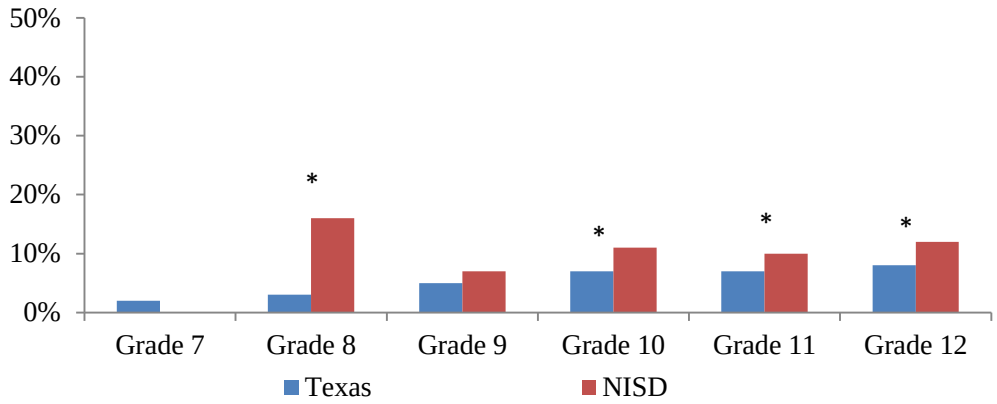
Next, we provide data concerning substance use by grade within NISD in 2012. This more detailed data further demonstrate significantly higher rates of youth substance use than Texas averages (Figures 6 and 7). As stated above, NISD was the only school in 2012 to have grades 6 through 12 participate in the Texas School Survey data. In SAISD, 2008 was the most recent year in which all grades participated. Thus, to present the most recent and representative data, we will use the 2012 NISD data to represent Bexar County as a whole.

Figure 6. Texas and NISD Youth Alcohol Use In Past Month, 2012



* Statistically significant difference at $p < .01$.
Source: 2012 NISD Texas School Survey of Drug and Alcohol Use

Figure 7. Texas and NISD Youth Marijuana Use In Past Month, 2012



* Statistically significant difference at $p < .01$.
Source: 2012 NISD Texas School Survey of Drug and Alcohol Use

NISD is the largest school district in Bexar County; about half of its students are economically disadvantaged and identify as Hispanic or Latino. SAISD is the largest school district in Bexar County with a high percentage of youth (around 90%) who are economically disadvantaged and identify as Hispanic or Latino. These districts are representative of other Bexar County districts that are demographically similar to NISD and SAISD. As such, while data are consistent with the national trend that substance use has decreased in the last two decades, Bexar County youth report rates of substance use that are in many cases higher than national averages. The most common substances of choice are alcohol and marijuana and substance use generally increases with age. These data suggest that although substance use treatment programs should be prepared to treat youth using prescription drugs, Ecstasy, cocaine, methamphetamines, heroin, and other substances, the primary substances to target for interventions are alcohol and marijuana. The program currently being developed will recruit from all school districts in Bexar County, as our data suggest that substance use may be high in all of them, regardless of differences in demographic variables.

Demographics of Youth Substance Use

It is important to determine which demographic characteristics are related to youth substance use, to identify youth who may be at higher risk. Again, we present data for NISD only as it is the only district that participated most recently and has the most grades represented in the past 6 years. All the following data match national data and published research results. Thus, the information is likely representative of other Bexar County ISDs.

Table 9 illustrates the percent of NISD youth who have used certain substances one or more times by sex, race, and grade level. Slight sex differences are seen for most substances, with females reporting more alcohol and inhalant use and males reporting more of the other substances. The largest difference is seen in marijuana use, in that 29% of males reported use compared to 23.6% of females.

Hispanic youth report rates of use similar to or higher than rates for White or Black youth for most substances. For example, Hispanic (60.1.8%) and White (62.2%) youth report higher alcohol use than do Black youth (54.5%). Hispanic youth (17.7%) report higher use of inhalants than either White (15.9%) or Black (12.3%) youth. The proportion of youth who report substance use increases with age across the different substance types. Overall, the data suggest that substance use is most common among males, Hispanic youth, and older youth.

Nonetheless, substance use is widely prevalent across gender, race, and grade levels. For example, every group reported a lifetime prevalence rate of alcohol use of at least 50%. This fact suggests that treatment programs should be developmentally appropriate, include gender-relevant information, and be applicable for youth from a range of ethnic backgrounds.

Table 9. Texas Substance Lifetime Prevalence

	Alcohol	Marijuana	Inhalants	Ecstasy	Hallucinogens	Cocaine	Heroin
Total	57.5%	26.2%	15.7%	5.7%	4.1%	4.2%	1.1%
Male	55.9%	29.0%	14.6%	6.0%	5.0%	5.0%	1.1%
Female	59.1%	23.6%	16.8%	5.4%	3.2%	3.4%	1.1%
White	62.2%	32.9%	15.9%	5.0%	6.7%	3.0%	.4%
Black	54.5%	27.0%	12.3%	3.0%	1.9%	1.5%	.9%
Hispanic	60.1%	29.1%	17.7%	7.0%	4.0%	5.9%	1.3%
Ninth	59.7%	26.2%	17.3%	5.1%	3.8%	3.6%	1.2%
Tenth	64.3%	32.3%	14.5%	7.3%	5.3%	5.1%	1.1%
Eleventh	68.6%	37.0%	13.3%	9.2%	6.0%	6.7%	1.2%
Twelfth	72.7%	41.8%	12.0%	10.3%	6.7%	7.2%	1.1%

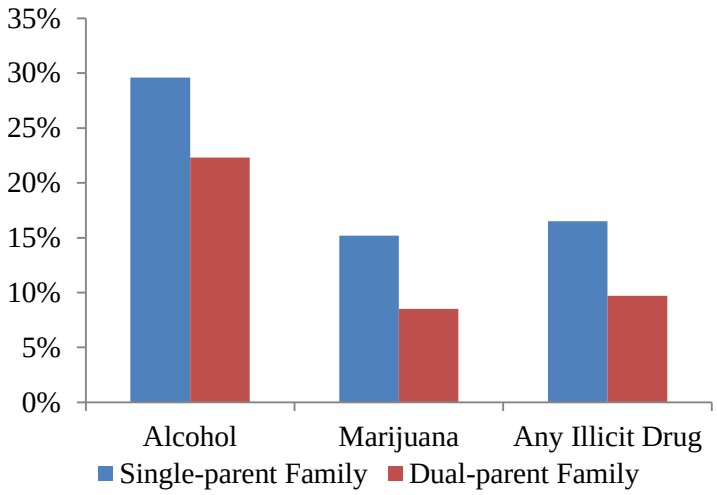
Source: Texas Youth Risk Behavior Survey, 2011

Other Correlates Related to Youth Substance Use

Previous research has suggested that a number of factors are related to youth substance use: family type, peer substance use, and beliefs about substance use. The Texas School Survey includes questions about these variables, allowing us to use the 2012 NISD data to examine whether they are correlated with substance use among Bexar County youth. As described below, this information will inform the development of our treatment program to most effectively meet the needs of the youth in the program.

First, youth from dual-parent households demonstrate lower levels of substance use (Hemovich, Lac, & Crano, 2011). Consistent with this research, Figure 8 shows that NISD youth who live with both parents are less likely to report using alcohol, marijuana, or any illicit drug. As discussed earlier, youth in single-parent households are also more likely to live in poverty (see Table 5). This is important because 38% of Bexar County youth live in single-parent households (2012 American Community Survey). Thus, more than one-third of Bexar County youth are at higher risk for substance use. These single-parent households may benefit from additional support, such as parenting classes during substance use treatment and high-quality aftercare programs once treatment is complete.

Figure 8. Family Type and Substance Use in Past Month



Source: 2012 NISD Texas School Survey of Drug and Alcohol

Second, previous research has shown youth that whose friends who engage in substance use are more likely to use substances themselves (Hemovich, Lac, & Crano, 2011; Tang & Orwin, 2009). Table 10 shows that NISD youth were more likely than were Texas youth to report that some or most of their friends use alcohol and marijuana. Among NISD youth, 71.4% perceive that at least a few of their friends use alcohol, and 63.3% perceive that at least a few of their friends use marijuana. In the 2012 NISD Texas School Survey, 58% of the students reported any alcohol use and 26% reported any marijuana use. Thus, these youth may be overestimating the number of peers who engage in substance use and thereby increasing their risk for initiating substance use.

These data inform the development of substance use treatment programs in several ways. First, treatment programs may address these beliefs by providing accurate information concerning substance use among youth matched on age and gender. This educational component may decrease the overestimation of peer substance use, thus decreasing their own substance use. Second, for youth whose friends are using substances, treatment programs can focus the youth and the parent on engaging in prosocial activities. This information could give youth options for activities other than substance use, or encourage engagement with peers who do not use substances.

Table 10. Youth Beliefs Regarding Their Friends' Use of Alcohol and Marijuana, Grades 7 – 12

	None	A Few	Some	Most	All
Texas					
Alcohol	32.9%	23.9%	18.2%	18.2%	6.8%
Marijuana	48.9%	18.6%	14.0%	13.4%	5.2%
NISD					
Alcohol	28.6%	23.1%	21.5%	20.0%	6.7%
Marijuana	36.7%	16.8%	17.3%	21.6%	7.6%

Source: 2012 Texas and NISD Texas School Survey of Drug and Alcohol Use

Third, youth who perceive that alcohol and drug use is not dangerous are more likely to use substances (Plancherel, Bolognini, Stephan, Laget, Chinet, Bernard, Halfon, 2005). Although most NISD youth believe that alcohol and marijuana are very dangerous, over 20% of

youth rate alcohol and marijuana as not very dangerous or not at all dangerous (Table 11). The data concerning perceptions of marijuana use are especially troubling. First, NISD and Texas youth are more likely to consider marijuana than alcohol not at all dangerous. Second, NISD youth were even more likely than were Texas youth to perceive marijuana is not very dangerous or not at all dangerous. Based on the research discussed above, these youth may be at higher risk for substance use. These data suggest that new substance use treatment programs in Bexar County may benefit from including an educational component including information on how alcohol, marijuana, and other drugs pose threats to one's health and safety.

Table 11. Student Beliefs of the Danger of Using Alcohol and Marijuana, Grades 7 – 12

	Very Dangerous	Somewhat Dangerous	Not very Dangerous	Not at All Dangerous	Do Not Know
Texas					
Alcohol	50.3%	29.7%	13.3%	3.2%	3.5%
Marijuana	58.2%	14.2%	11.8%	12.0%	3.8%
NISD					
Alcohol	47.9%	31.4%	14.0%	3.2%	3.5%
Marijuana	47.6%	17.2%	14.8%	17.7%	2.7%

Source: 2012 Texas and NISD Texas School Survey of Drug and Alcohol Use

In summary, the demographic data suggest that adolescent treatment programs should be prepared to provide service to youth who are primarily Hispanic, low-income, and from single-parent households. The information also suggests that programs should focus on alcohol and marijuana use and should be developmentally appropriate, since both middle-school and high-school students will likely be in need of services.

In Bexar County, substance use is related to perceptions concerning the number of friends who use alcohol and drugs and the danger of using drugs. This section greatly informs the development of our new treatment program. The program currently under development will use two treatment methods, Motivational Enhancement Therapy (MET) and Cognitive Behavioral Therapy (CBT). Combined, these therapies will address youth perceptions of peer use and the dangers of substance use in adolescence. The primary tool to target these attitudes will be a Personalized Feedback Report, an evidence-based tool that greatly facilitates delivering information to youth about peer norms and the consequences of substance use. Importantly, this tool also allows the therapist and youth to reflect on objective information about the magnitude of the youth's substance use compared to peers, and the effects of this use on safety and other aspects of their lives.

Risky Behavior Associated with Use

Youth who use alcohol and drugs are also likely to engage in other risky behaviors. For example, youth substance use is related to risky driving behaviors, which may lead to death or traumatic injury, and risky sexual behavior, which increases the chance of pregnancy or contracting a sexually transmitted disease. Both motor vehicle accidents and sexual health were identified as areas for improvement in the Community Health Improvement Plan in the RHP 6 Community Needs Assessment (http://www.texasrhp6.com/wp-content/uploads/2012/09/Section-III-Needs-Assessment-Report_updated-0926.pdf). It is important that youth treatment programs address risky driving and sexual behavior, which are associated with substance use. Increasing the availability of youth substance use treatments in Bexar County may indirectly address these larger RHP 6 community health concerns. Unfortunately, the Texas School Survey

includes few questions related to these behaviors. Therefore, we used statewide data when data from the Texas School Survey were not available. These data demonstrate adolescent health concerns that are likely to be addressed by the availability of youth substance use treatment programs.

Driving Under the Influence of Alcohol and Drugs

Texas has over 630,000 licensed teenage drivers (Texas Public Safety Threat Overview, 2013), and their driving while under the influence of alcohol is a significant risk factor for injury or death. During 2012 (the most recent year for which data are available), there were 89,256 arrests for DUI across all ages in Texas, a 17% increase over 2011. Of all those arrested for DUI, 0.13% were 16 years old or younger and 8.3% were under 21, the legal drinking age (Texas Department of Public Safety, 2013). Furthermore, in 2013, 1,498 people died in alcohol-related crashes in Texas, out of 3,353 total motor vehicle traffic fatalities. Of these deaths, 943 were drunk drivers, 81 (9%) of whom were under 21 years of age (Texas Department of Transportation, 2013). Table 12 shows that the risk of youth driving under the influence of alcohol is highest among males, Hispanic or Latino and White youth, and older youth.

Table 12. Texas Youth Reporting Drinking and Driving (Past Month)

Characteristic	%
Gender	
Male	11.9
Female	8.3
Race	
White	11.5
Black	4.4
Hispanic	11.1
Other	7.2
Grade	
Ninth	6.6
Tenth	7.2
Eleventh	11.1
Twelfth	17.0

Source: Texas YRBS 2011

Driving under the influence of marijuana and other drugs also increases with age. By twelfth grade, about 15% of Texas youth report driving while feeling high at least once in the past month (Table 13). These data suggest that area youth report high levels of driving under the influence of alcohol and drugs. Thus, new treatment programs should consider addressing the risks of driving under the influence of alcohol and drugs. For example, aspects of existing DWI treatment programs shown to be effective, such as the Motivational Alcohol Treatment to Enhance Roadway Safety (MATTERS) Program (Ryan, Mathias, Mullen, Galindo, & Dougherty, 2014) and the Cutting Back Program (Davis, Beaton, Worley, Parsons, & Gunter, 2012), may be integrated into educational components of youth substance use programs in Bexar County, especially among older youth.

Table 13. Texas Youth Reporting Driving while High from Drugs (Past Month)

Grade	Number of Times Driving While High			
	1-3	4-9	10+	None
9	2.9%	0.5%	0.6%	96.0%
10	4.5%	1.3%	1.2%	93.0%
11	6.4%	1.8%	2.3%	89.5%
12	9.0%	2.7%	4.2%	84.2%
Total	5.5%	1.5%	2.0%	91.1%

Source: 2012 NISD Texas School Survey of Drug and Alcohol Use

Risky Sexual Behavior

Table 14 shows that a large proportion of sexually active youth reported using alcohol or drugs before the last instance of sexual intercourse. Rates were especially high for males and White and Hispanic or Latino youth. Alcohol and marijuana use before sex is related to decreased likelihood of condom use, increased frequency of intercourse, and number of sexual partners (Bryan, Schmiege, & Magnan, 2012). These three factors are in turn related to the risk of contracting a sexually transmitted disease (STD). Table 15 shows the rates for chlamydia, gonorrhea, and syphilis (three of the most common STIs reported to the U.S. Centers for Disease Control and Prevention), among youth ages 0-14 and 15-19. These data suggest that Texas youth report rates of STI diagnosis similar to or above national averages. The rate of Texas youth with syphilis is especially high.

Together, Tables 14 and 15 suggest that STIs are a significant public health concern in Texas, and that youth substance use may contribute to this issue. Youth treatment programs that include an educational component about the risks of having sex under the influence of drugs or alcohol may help reduce the rate of STDs among youth.

Table 14. Sexually Active Youth who Used Alcohol or Drugs Before Last Instance of Sexual Intercourse

Characteristic		%
Gender		
	Male	30.7
	Female	18.1
Race		
	White	27.4
	Black	17.9
	Hispanic	24.2
Grade		
	Ninth	24.3
	Tenth	23.0
	Eleventh	25.2
	Twelth	23.6
Total		24.2

Source: Texas YRBS 2011

Table 15. STI rates per 100,000 for youth aged 0-14 and 15-19

	Texas	Nation
Chlamydia		
0-14	24.4	25
15-19	2063	2001
Gonorrhea		
0-14	6.4	5.6
15-19	376.8	476.6
Syphilis		
0-14	0.1	0
15-19	8.1	3.3

Source: Centers for Disease Control and Prevention, STD Surveillance Data, 2012

The data in this section suggest that youth substance use is related to at least two forms of risky behavior, which the RHP 6 region targeted in its Needs Assessment. Sizeable percentages of youth engage in substance use before driving and sexual intercourse, which may have significance repercussions on physical and sexual health. Treatment programs that decrease substance use among youth may also decrease these risky behaviors. One direct way of targeting these behaviors in a substance use program is to provide Personalized Feedback Reports and Motivational Interviewing to spur behavioral change.

Consequences of Youth Substance Use

Adolescent substance use can have significant repercussions for the individual and community. Below, we discuss how youth substance use in Bexar County may be related to substance-related diagnoses in medical facilities, involvement in the criminal justice system, and academic performance.

Substance-Use Related Medical Diagnoses

We received data collected from Bexar County health care centers between January 2012 and April 2014. We analyzed the 7,906 youth aged 10 to 18 (average age = 16.0) receiving diagnoses related to substance use (39.6% were female, and 60.4% were male). Table 16 illustrates the ethnic composition of the patients.

Table 16. Racial Demographics of Youth with Drug-related Diagnoses

Race	N	%
White	6143	77.9*
Hispanic	608	7.7
Black/African-American	563	7.1
Asian	85	1.1
Multi-Racial	78	1.0
Unknown	303	3.8

Source: University Health System Clinic Data

* The option to identify as White and Hispanic was not available, which may explain why most youth identified as White when 70% of Bexar County youth identify as Hispanic.

These individuals received a total of 15,927 substance-use related diagnosis codes. There was an average of two drug-related diagnoses for each patient; substance-related diagnostic

codes per patient ranged from 1 to 11. Table 17 contains information concerning the diagnoses received at different locations of health care centers. Two trends in this data are notable. First, the most frequent diagnoses included alcohol and cannabis abuse or dependence. Significant numbers were also diagnosed with opiate, sedative, cocaine, and amphetamine abuse and dependence. Therefore, effective treatment programs for Bexar County youth should focus on alcohol and marijuana use but also address other forms of substance use.

Second, although many youth received substance-use related diagnoses within emergency care (ER, EMS, Express Med, and Acute Care), most diagnoses occurred during primary care visits (including pediatric, family health, and well visits) and juvenile justice settings. Although many youth were diagnosed in the "other" location category, this category included many small areas within the same hospital, and each location only reported a few substance-use related diagnoses. Assessing the frequency of diagnosis across locations in medical facilities helps to determine what departments to notify of services and whether we should implement aspects of services within specific settings, such as the emergency room.

Table 17. Substance-related Diagnoses by Location

	Type of Substance-Related Diagnosis									
Location	Cannabis*	Alcohol*	Opiate*	Sedative, hypnotic, or anxiolytic*	Cocaine*	Amphetamine & psycho-stimulant*	Hallucinogen abuse	Drug-induced mental disorder	Other & combinations*	Total
Emergency Care										
ER	250	80	35	39	31	22	7	14	303	781
EMS	25	12	2	8	3	3	1	4	39	97
Exp. Med	282	92	53	19	42	27	3	25	363	906
Acute Care	47	35	17	12	3	0	0	12	85	211
Juv. Justice	1672	636	357	383	209	174	47	58	1390	4926
Primary Care	1084	285	237	57	83	71	16	139	1827	3799
Diabetes	95	73	4	8	33	16	0	4	99	332
Beh. Health	85	26	8	1	10	0	0	27	75	232
Inpatient	69	21	11	10	6	14	3	8	80	222
OP Clinic	70	17	60	1	2	0	0	0	84	234
Other	1175	476	232	174	181	110	27	61	1751	4187
Totals	4854	1753	1016	712	603	437	104	352	6096	15927

Source: University Health System
*Indicates abuse or dependence.

Data on the discharge disposition was available for 5,873 (74.3%) of the 7906 total patients. This data showed that the majority, 5,614 (96%) of these patients, were discharged to their homes. Discharges to other locations were much rarer: Thirty two were transferred to a psychiatric hospital (.005%), seven to a rehab program (.001%), 40 to the juvenile justice system (.007%), and 22 to hospice (.004%). In addition, 51 were still a patient when this data was gathered (.009%) and 37 left against medical advice (.006%). This suggests a high need for outpatient care for these youth released into the community.

Table 18 shows the payor information for these patients. Over half (58.1%) were uninsured, and 30.8% were on Medicaid or Medicare. Few were covered by private insurance or other forms of insurance. Because most youth with substance-use related diagnoses are

discharged to their home, Bexar County substance-use outpatient programs may have high numbers of youth who are uninsured and receiving Medicaid. The current program in development will focus on recruiting uninsured and Medicaid youth.

Table 18. Payor Information for Patients with Substance-related Diagnoses

Payor Type	N	%
Uninsured	4590	58.1
Medicaid/Medicare	2435	30.8
UHS Obligated Payee	414	5.2
Other Federal Program	199	2.5
Private	194	2.5
CHAMPUS	43	0.5
Workers Comp	6	0.1
State and Local Gov	4	0.1
Not Available	21	0.3

Source: University Health System

Involvement in the Juvenile Justice System

Another significant possible consequence of youth drug use is involvement with the juvenile justice system. Table 19 shows data collected from The Department of Uniform Crime Reporting at the Texas Department of Public Safety concerning drug-related and alcohol-related charges in Bexar County during 2012 (the most recent year for which data are available). In that year, 1,624 youths were arrested for drug violations, sale or manufacture of drugs, or possession of drugs, significantly more than the 68 youths arrested for violation of liquor laws. These data show that males were more likely to be arrested, and the rate of arrests increased with age. Substance use programs may choose to incorporate an educational component that informs youth of the risk of getting arrested for drug and alcohol use. Effective substance use programs may decrease the number of youth in Bexar County who are arrested for these offenses.

Table 19. Bexar County Drug- and Alcohol-related Arrests Under 18 Years of Age, 2012

		Age in years					
Type of Violation	Sex	10-12	13-14	15	16	17	Tot. under 18
Drug Abuse Violations (Total)	M	18	87	109	157	282	653
	F	9	22	35	32	61	159
Drugs - Sale or Manufacture	M	1	4	11	17	38	71
	F	0	1	1	3	11	16
Drugs - Possession	M	17	83	98	140	244	582
	F	9	21	34	29	50	143
Liquor Laws	M	1	5	8	7	23	44
	F	3	1	2	7	11	24

Source: Texas Department of Public Safety UCR, 2012

School and Academic Consequences

Substance use puts youth at risk for difficulties in school, including disciplinary actions, absences, and lower grades (Busch, Loyen, Lodder, Schrijvers, van Yperen, & de Leeuw, 2014). A significant number of Bexar County students were suspended or expelled due to

tobacco, alcohol, or drug violations during the 2012-2013 school year. There was wide variation between school districts in the numbers of disciplinary actions, with NISD, SAISD, and North East ISD reporting the highest numbers (bolded in Table 20). Many schools with the highest percentage of economically disadvantaged students (Table 7) also reported high numbers of youth with disciplinary actions, such as Edgewood ISD, Harlandale ISD, and Southwest ISD. Together, these data suggest that newly established treatment programs may best benefit Bexar County by including many school districts in their recruitment efforts. The treatment program currently being developed will include the districts with high rates of economically disadvantaged youth and disciplinary action.

Table 20. Discipline Data for Bexar County School Districts, 2012-2013

	Controlled Substances	Alcohol Violation	Tobacco
San Antonio ISD	**621**	**18**	**132**
Edgewood ISD	127	n/a	8
Harlandale ISD	133	n/a	n/a
S. San Antonio ISD	73	n/a	not reported
Southwest ISD	104	6	5
Somerset ISD	17	9	n/a
Southside ISD	42	n/a	n/a
East Central ISD	64	n/a	8
Judson ISD	203	11	n/a
Northside ISD	**633**	**40**	**68**
North East ISD	**463**	**54**	**61**
Ft. Sam Houston ISD	n/a	not reported	n/a
Lackland ISD	n/a	not reported	not reported
Alamo Heights ISD	20	25	n/a

* Counts less than 5 and greater than 0 are shown as "n/a" to comply with FERPA.
Source: Texas Education Agency 2012-2013 Bexar County School Discipline Data

NISD data from the Texas School Survey suggested that youth who engaged in any alcohol or marijuana use also reported more conduct problems and school absences (Table 21). Furthermore, about 10% of youth reported attending school while high on marijuana in the past school year (Table 22). Conduct problems, absenteeism, and attending school while under the influence of drugs and alcohol are all likely to reduce attention, concentration, and therefore long-term academic achievement. Given the similarities in NISD and SAISD substance use rates (see Figure 5), it is likely that SAISD rates would resemble those of NISD. Furthermore, as SAISD and NISD are representative of schools with large and moderate percentage of low-income and Hispanic or Latino students, respectively, these data are likely representative of most or all Bexar County youth.

Table 21. School Conduct Problems among Alcohol and Marijuana Users and Non-Users

	Average days conduct problems reported	Average days absent
Alcohol Users	2.8	4.3
Alcohol Non-Users	1.0	3.3
Marijuana Users	3.9	4.5
Marijuana Non-Users	1.2	3.5

Source: 2012 NISD Texas School Survey

Table 22. Frequency of School Attendance While Under the Influence of Drugs or Alcohol

	Number of Times Attended after Drug Use			
Type of Drug	None	1-3 Times	4-9 Times	10+ Times
High from Marijuana Use	89.3%	5.6%	2.0%	3.1%
High from Some Other Drug	95.2%	2.9%	0.8%	0.1%
Drunk on Alcohol	93.5%	4.9%	0.9%	0.7%

Source: 2012 NISD Texas School Survey

Given the differences between youth who engage in substance use and those that do not, it is not surprising that substance use is related to grades. As Table 23 shows, youth who reported lower than A grades were significantly more likely to report alcohol, marijuana, and overall drug use compared to students with A grades. Together, this research suggests that treatment programs that include an educational component about how substance use may affect academic performance may decreasing substance use and indirectly improve school outcomes.

Table 23. Percent of Students Reporting A Grades and Lower than A Grades by Substance Use

	Past Month	School Year	Ever Used	Never Used
Alcohol				
Students Reporting A Grades	17.8%	27.0%	48.2%	51.8%
Students Reporting Lower than A Grades	28.2%	38.9%	61.6%	38.4%
Marijuana				
Students Reporting A Grades	5.7%	8.9%	14.9%	85.1%
Students Reporting Lower than A Grades	13.4%	19.1%	31.1%	68.9%
Any Illicit Drug				
Students Reporting A Grades	6.5%	9.7%	15.8%	84.2%
Students Reporting Lower than A Grades	14.8%	20.3%	32.2%	67.8%

Source: 2012 NISD Texas School Survey

Tables 16 through 24 demonstrate that adolescent substance use is a significant concern in terms of physical health, legal, and academic outcomes. In Bexar County, adolescent substance use leads to numerous contacts with health providers. It is also related to referrals to the juvenile justice system, school discipline difficulties, lower attendance, and lower grades. Local treatment programs that decrease youth substance use may decrease their involvement in local medical facilities and juvenile justice system, and improve academic outcomes.

Availability and Use of Youth Substance Use Treatment Resources

This section describes the availability and use of treatment resources for Bexar County youth who use substances. We begin by outlining youth substance use treatment programs that are available in Bexar County and the current gaps in treatment. We will then describe the youth who use these services and who may currently have less access to these services.

Youth Substance Use Treatment Resources

Currently, nine facilities offer youth substance use treatment in Bexar County, and six offer substance use-specific programs. Table 24 shows the nine existing programs and whether they (a) have a specific youth substance use program; (b) offer residential and/or outpatient programs; and (c) offer individual, family, and/or group therapy, and/or (d) offer continued care.

Table 24. Existing Youth Substance Use Treatment Programs

	Max # of Patients	Substance-Use Spec. Prog	Residential (R) or Outpatient (OP)	Individual (I), Family (F), or Group (G)	Continued Care (CC)
Alpha Home	47		R & OP	I & G	
Center for Health Care Services	N/A	Y	OP	G	
Elite Counseling	N/A	Y	OP	I & G	
Family Services (Keeping It Real)	33	Y	OP	I &F	CC
Laurel Ridge	N/A		R & OP	I, F, & G	
Palmer Drug Abuse Program	N/A	Y	OP	I & G	
Project Tejas	50	Y	OP	I, F, & G	
SA Counseling & Beh Center	50		OP	I & F	
Selena Center for Youth Potential	16	Y	R	I, F, & G	

N/A = These programs do not have a limit to the number of patients enrolled.

As shown, six of the treatment programs are outpatient, one is a residential program with a limit of 16 patients (limited to females), and two have both outpatient services and inpatient programs. All but one of the programs offer outpatient care, the primary setting for youth substance use. However, capacity is quite limited, suggesting that youth who need treatment may not be receiving these services. Thus, more outpatient treatment programs are needed.

Table 25 shows the available treatment programs and the forms of therapy used in each program. Four programs offer a Cannabis Youth Treatment (CYT) Curriculum. CYT uses Motivational Enhancement Therapy (MET) and Cognitive Behavioral Therapy (CBT). The Keeping It Real Program through Family Services Association uses Adolescent Community Reinforcement Approach (ACRA) therapy and Assertive Continuing Care (ACC). ACRA is a behaviorally-based therapy that increases the positive activities of youth. ACC connects youth with community resources to help youth deal with challenges to recovery. Laurel Ridge Treatment Center includes the GORSKI-CENAPS model that focuses on relapse prevention. This program identifies behaviors, people, and attitudes that contribute to substance use and works to counteract these factors. Palmer Drug Abuse Program offers a 12-step program, and San Antonio Counseling and Behavioral Center offers CBT and psychotherapy.

Only five existing programs provide a parenting component: Alpha Home offers information on parenting skills; Elite Counseling, Keeping It Real, Project Tejas, and the Selena

Center for Youth Potential offer therapy for parents. Given that having a family or parental component to adolescent substance use program is standard of care (CSAT, 1999), there is a need for more youth substance use treatment programs with an educational and/or therapy component for parents.

Table 25. Existing Youth Substance Treatment Programs and Therapies Used

Program Title	Therapy Used	Parenting Component
Alpha Home	MET	Parenting Skills
Center for Health Care Services	MET/CBT	Family Support Network
Elite Counseling	MET/CBT	Family Support Network
Family Services (Keeping It Real)	Adolescent Community Reinforcement Approach & Assertive Continuing Care	Parent only (2 sessions) Family therapy (2 sessions)
Laurel Ridge Treatment Center	GORSKI-CENAPS	None
Palmer Drug Abuse Program	12-Step Program	Support Groups
Project Tejas	MET/CBT	Family Support Network
SA Counseling & Beh Center	CBT & Psychotherapy	None
Selena Center	MET/CBT	Family Support Network

Many of the nine existing programs use evidence-based treatment therapies. However, a need remains for more programs with further components shown to be effective. First, more programs offering continued care are needed; only one program provides continuing care for youth and their families through the ACC program. Second, there is a need for more programs with parenting components; only one program offers education about parenting skills. Third, no programs use incentive-based therapies. Research suggests that incentive-based programs, such as contingency management, are effective in reducing substance use among youth (Stanger, Budney, Kamon, & Thostensen, 2009). Lastly, these data show a need for more treatment programs in general, as the capacity of the current programs is low (Table 24) relative to the number of youth reporting substance use in Bexar County (i.e., Table 6).

Current Use of Youth Substance Use Treatment

Only a few of the currently available youth substance use programs used funding from Texas Department of State Health Services (DSHS) to treat youth in the past year. DSHS provides funds to treatment programs that serve low-income, Medicaid, and uninsured patients to offset the cost of their care. Given the high percentage of Bexar County youth who are low-income (Table 5), enrolled in Medicaid (Table 2), or uninsured (Table 1), treatment programs that serve these populations are critically important.

DSHS provided us with information concerning the use of these DSHS-funded treatment programs. As Table 26 shows, relatively few Bexar County youth participate in substance use treatment funded by DSHS. Of those who did receive services from DSHS-funded programs, 75% were served in outpatient programs.

Table 26. Number of Individuals in Bexar County Served in Substance Use Treatment

	Texas	Bexar County
Youth Outpatient	3636	228
Youth Residential	2090	78
Total	4848*	330*

*The numbers of youth served in outpatient and residential treatment programs do not add up to total youth because people can be served in both types of programs.
Source: DSHS, 2013

According to the DSHS, only DSHS-funded treatment programs that served youth in 2013 were in Bexar County. The other youth received treatment from outpatient or residential substance outside of Bexar County (Table 27). Three of the programs within Bexar County were outpatient and one was residential.

The fact that most low-income, Medicaid, or uninsured youth in Bexar County travelled a great distance to receive treatment again indicates a significant need for increased options for local evidence-based care. A lack of transportation, inability of the parents to take time off work to travel, and limited resources to pay for travel expenses may lead low-income adolescents in Bexar County to have inadequate access to care. Out-of-area treatment programs may also decrease the use of parental and after-care components. Families who must travel to take their child to receive substance use treatment may be less likely to participate in any therapy or educational components offered to parents, especially if the child is admitted to a residential program. Families may also be less likely to travel back to the treatment location for follow-up appointments involved in continued care.

Table 27. DSHS-Funded Substance Use Programs Who Treated Bexar County Youth

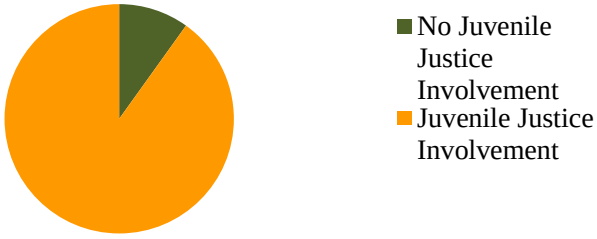
Location	Residential or Outpatient
In Bexar County	
Selena Center for Youth Potential	Residential
Project Tejas	Outpatient
The Center for Health Care Services	Outpatient
Elite Counseling	Outpatient
Outside of Bexar County	
Cenikor Foundation (Dallas, Houston, Waco, Temple, Killeen)	Residential
Center for Success and Independence (Houston)	Residential
Phoenix Houses of Texas, Inc. (Austin, Dallas, Houston)	Residential
Unlimited Visions Aftercare (Houston, Baytown, Pasadena)	Residential
Permian Basin Community Centers for MHMR (Midland)	Outpatient
South Texas Rural Health Services, Inc. (Cotulla)	Outpatient
Tri-County Services (Dallas area)	Outpatient

Source: DSHS, 2013

As a further barrier to substance use treatment, few youth appear to receive DSHS-funded treatment without involvement in the juvenile justice system. Most youth (91%) admitted to DSHS-funded substance abuse treatment programs in Bexar County during 2013 were involved in the juvenile justice system (Figure 9). This high percentage shows that the Bexar County juvenile court frequently refers youth to DSHS-funded programs. It also suggests that community youth who use substances but are not involved in the juvenile justice system are less likely to receive needed treatment, especially by DSHS-funded programs.

Engaging these youth in substance use treatment before they become involved in the juvenile justice system may decrease the number of youth arrests for drug-related crimes. This again shows the need for treatment programs designed to treat low-income youth in Bexar County.

Figure 9. Juvenile Justice Status of Bexar County Youth Admitted to Substance Use Treatments



Source: DSHS, 2013

Marijuana is the primary substance of use reported by youth at time of substance use treatment admissions (Table 28). About 90% of Bexar County youth and 87% of Texas youth who engaged in substance use treatment reported marijuana as the primary substance. Therefore, the program currently under development should be prepared to address marijuana use among most of the youth it serves.

Table 28. Bexar County Youth Residential and Outpatient Admissions to Treatment by Primary Substance

Substance	Texas	Bexar County
Marijuana	5035	274
Alcohol	188	14
Cocaine	98	*
Methamphetamine	82	*
Other	383	16

*Numbers smaller than 10 are masked in compliance with HIPAA
Source: DSHS, 2013

Lastly, it is important to monitor the effectiveness of current treatment programs. Levels of initiation and engagement of care are frequently-used indices of mental health treatment. An individual is considered to have *initiation* of care when she or he meets with a therapist within 14 days of receiving a diagnosis. *Engagement* of care is when the individual meets with a therapist at least two more times within 30 days of initiation of care. Data suggest that among youth who participated in DSHS-funded treatment program, 78% met with the provider the day they received the diagnosis; and a total of 91% were first seen within two weeks of receiving a substance use diagnosis, thereby meeting the requirements for initiating care. Unfortunately, we could not obtain reliable data indicating levels of engagement among these youth.

Approximately 50% of Bexar County youth admitted to substance use treatment completed their treatment, compared to the Texas average of 52% (DSHS, 2013). Most youth who did complete their treatment reported abstinence (Table 29), but since these rates are likely self-reported, they are probably over-estimated. Treatment programs that offer objective assessment of substance use following treatment are needed.

Table 29. Completion and Abstinence Levels of Texas and Bexar County Youth Admitted to Substance Use Treatment

	Percent of Youth Completing Treatment	Percent Who Completed Reporting Abstinence
Texas	52%	90%
Bexar County	50%	80%

Source: DSHS, 2013

The information presented in this section demonstrates the limited resources in adolescent substance use treatment in Bexar County, both in the number of programs and patient capacity. The greatest need is for more treatment programs that service low-income, uninsured, and Medicaid-enrolled youth. As shown by the data from DSHS, there are even fewer programs that treat this population and a much lower patient capacity.

Thus, this section indicates a clear need for more adolescent treatment programs in Bexar County, and that new programs (especially those that serve low-income, uninsured, or Medicaid youth) should provide MET and CBT, much like existing programs. These programs should also expand to include family or parent components, continued care, and other evidence-based treatments known to increase initiation and engagement in treatment.

Parent Reports of Treatment Needs

Although parents can play an important role in the success of substance use treatment, most programs in Bexar County do not engage parents during or after treatment (see Table 25). To explore parents' perceptions of their needs, we conducted focus groups and collected survey data.

First, we conducted two focus groups with a total of 10 parents with adolescent children currently enrolled in substance use treatment programs. The focus groups were part of an ongoing project to develop an aftercare program for parents. The focus groups' comments were audio-taped, transcribed, and then analyzed.

The first aim of the focus groups was to discuss parents' skills to facilitate communication with their child, apply consequences to monitor and discipline their child, encourage their child to become involved in positive social activities, and assist their child in setting and meeting goals. Very few parents reported learning such skills as part of their child's substance use treatment or in parenting classes. In fact, only 3 of 10 parents mentioned parenting classes as helpful; most reported not participating in parenting classes or not finding them helpful.

Instead, most parents talked about learning from trial and error. In these discussions, most parents reported attempts to establish and improve communication with their child. Techniques included shared activities, improved listening, and sharing their own history of mistakes. Many parents also discussed expressing unconditional love for their child to maintain a close relationship while increasing discipline.

Many parents also reported relatively ineffective strategies, such as low levels of supervision. Few parents discussed ways to monitor their child's academic, peer, or even substance use behavior. Furthermore, few reported setting consistent rules and/or following through with discipline. Few reported discussing social activities or goal-setting. Parental monitoring, discipline, and communication about activities and goals are related to lower rates of adolescent substance use rates (Lac & Crano, 2009; Ryan, Jorm, & Lubman, 2010).

The second aim was to gauge interest in an aftercare program that would send text messages to parents about techniques to increase effective parenting after their child completes

substance use treatment. We sought to gauge parent interest in this method because it may be a cost-effective means of increasing parenting behaviors (monitoring, discipline, prosocial activities) related to reducing adolescent substance use. Most parents were enthusiastic about such an approach. Most said that they already send text messages frequently and find them a useful mode of communication. Many said that they would like to receive text messages with parenting tips a few times a week.

To determine the feasibility of adding a texting component to our program, we surveyed 30 parents who had an adolescent currently in a substance use treatment program. Some questions concerned the parents' preferences for continuing support after their child completes their treatment. Of the parents surveyed, all owned a cell phone and 90% currently used it to send text messages. In this group, 60% of parents said that they would find it useful to receive regular text messages from a therapist with parenting tips, after their child ends substance use treatment. Of these 60% who responded that they would benefit from regular text messages with parenting tips, the most rated tip was how to get involved in positive activities with their child (Table 30). This data suggests that the majority of parents would find aftercare useful and that text messaging may be a method for reaching these parents.

Table 30. Percent of Parents Endorsing Each Type of Text Message Tip

Tips on…	Percent of Parents Who Endorsed
Monitoring and supervising child's substance use	75%
Using consequences in response to child's substance use	45%
Getting involved in positive activities with your child	85%
How to communicate with your child	60%

NRLC, 2014

This section summarized focus group and survey data collected to explore how best to inform and support parents of children currently in substance use treatment. Two main findings emerged: (1) The few parents who took part in parenting components of their child's treatment reported that the education and/or therapy did little to change their parenting behaviors. Thus, the program currently being developed will engage parents throughout the treatment and focus on teaching effective monitoring, discipline, communication, and goal-setting techniques. (2) Parents were enthusiastic about a text-messaging support program once their child completes treatment. This suggests that such a cost-effective component of after-care may be useful to parents of adolescents in Bexar County after their child has completed substance use treatment.

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