

Problem Identification and Community Assessment of DWI Needs for Bexar County, Texas

April 2014

**Problem Identification and Community Assessment of DWI Needs
for Bexar County, Texas**

April 2014

Prepared by

Charles W. Mathias, Ph.D.

Stacy R. Ryan, Ph.D.

Jillian Mullen, Ph.D.

Sarah L. Lake, Ph.D.

Donald M. Dougherty, Ph.D.

University of Texas Health Science Center at San Antonio

and

Pamela C. Brown, Ph.D.

Licensed Clinical Psychologist and Community Consultant

in conjunction with

Vickie Adams

Charles Villafranca

The San Antonio Council on Alcohol and Drug Abuse

Cite as: Mathias, C. W., Ryan, S. R., Mullen, J., Lake, S. L., Brown, P. C., Adams, V., Villafranca, C., and Dougherty, D. M. (2014). Problem identification and community assessment of DWI needs for Bexar County, Texas (Center for Medicare & Medicaid Services report 085144601.2.6). University of Texas Health Science Center San Antonio.

Contents

| | |
|---|----|
| Introduction | 4 |
| Approach | 5 |
| Executive Summary | 6 |
| Geographical Area | 9 |
| Bexar County Demographic Characteristics..... | 11 |
| Health Care Coverage..... | 15 |
| Driving While Intoxicated (DWI)..... | 18 |
| Baseline Rates of DWI Recidivism..... | 19 |
| Arrests Across Time | 20 |
| Consequences of Driving While Intoxicated..... | 23 |
| Consequences of Alcohol Misuse | 24 |
| Alcohol Consumption Patterns..... | 25 |
| Substance Use Characteristics among DWI Offenders | 30 |
| Substance Abuse Treatment..... | 31 |
| Factors that Impact Treatment Completion | 33 |
| Treatment Needs (Non-Substance Use)..... | 36 |
| Healthcare Usage | 41 |
| Treatment Resources..... | 44 |
| The Treatment | 45 |
| References..... | 46 |

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) has been made available to hospitals and other providers for investments in delivery system reforms and programs that increase access to healthcare, improve the quality of care, and enhance the health of patients and families. This community needs assessment has been developed by the University of Texas Health Science Center, San Antonio, Neurobiological Research Laboratory and Clinic (NRLC) to support the funding waiver and meet the milestone put forth by the Center for Medicare & Medicaid Services (CMS).

The goal of the needs assessment is to provide support for NRLC and the University of Texas Health Science Center at San Antonio to design and implement an evidence-based treatment program for indigent DWI offenders in Bexar County. The document will show the high rate of DWI offenses that occur in this region, particularly, Bexar County and in San Antonio. It will also show that there are limited treatment resources for DWI offenders and limited treatment programs for the uninsured or underinsured. It will also show that of the treatment resources available for those with alcohol use disorders many are 12-step based or faith-based programs.

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 RHP 6 address the needs of this community. The aforementioned treatment program is in response to the deficits in treatment for alcohol related programs for DWI offenders who are uninsured, underinsured, or insured through Medicaid services within RHP 6. This needs assessment will show there is a high rate of DWI offenses in the region and that there is an overwhelming need for additional evidence-based treatment options for offenders that is proximal, and that the NRLC can provide.

APPROACH

The purpose of this needs assessment was to document and identify the complexity of behavioral health populations who frequent community public health resources because of their driving while intoxicated (DWI) offenses. This report outlines demographics, alcohol drinking patterns, socioeconomic status and health care utilization.

A multi-level analyses approach was used to construct this needs assessment that took into account data from a range of sources.

- First, we reviewed data about DWI offenses from the Bexar County Court Record. Because both the Bexar County Sheriff's Office and San Antonio Police Department have jurisdiction for DWI offenses in the county, both sources of data were collected.
- Next, to interpret these DWI rates within the broader context of the characteristics of our community, we surveyed publically available data systems like U.S. Census Bureau, the Center for Disease Control (CDC), Behavioral Risk Factor Surveillance System (BRFSS), and the Texas Department of State Health Services.
- Finally, to gain depth in understanding the epidemiological data, we conducted in-person assessments on 119 individuals, including 60 adults with DWI offenses recruited from the community of Bexar County and 59 adults with DWI offenses incarcerated for treatment in the Bexar County Community Supervision and Corrections Department. These interviews provided greater detail in relation to specific components of DWI offender health care utilization and access to treatment service that were not otherwise available through third party data sources or the Bexar County Court Record alone. Data that was generated from this in-person assessment is cited throughout this document as NRLC, 2014.

Data across these sources are presented with interpretation demonstrating the needs of our targeted population (low income adults with DWI offenses). This data justifies the selection of each of the components in our pending treatment program, which will fill a gap in availability of treatment service for DWI offenders.

To acquire secondary data necessary for this needs assessment the NRLC partnered with the nonprofit organization San Antonio Coalition on Alcohol and Drugs (SACADA). SACADA was founded over 50 years ago and has worked to educate the public about risks associated with tobacco, alcohol, marijuana, prescription drugs, and other substance use.

EXECUTIVE SUMMARY

Key Findings on Bexar County

- Bexar County is the 4th largest county in Texas and consists of 27 cities and municipalities of which 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 greatest proportion of individuals living in poverty and receiving Medicaid services.
- Bexar makes up 79% of RHP 6 in terms of population density and San Antonio, the largest metropolitan area within Bexar County makes up 76% of the county.

Key Findings on the Targeted Population within Bexar County

- In Bexar County and San Antonio the majority of the population is Hispanic, the majority of Hispanics over the age of 25 have high school education or less, and the majority that is over 16 years is employed.
- The percentage of families living at or below 200% of the Federal Poverty Level in Bexar County exceeds that of the state of Texas and United States.
- Over twice as many Hispanic adults as White adults in Bexar County were uninsured.
- Males in Bexar County were slightly more likely to be uninsured than females in Bexar County.
- Health insurance rates among Bexar County adults with DWI offences are considerably lower than the general population
- Close to 40% of low income residents of Bexar County are considered underserved.

Key Findings on DWI Offences

- There is a high rate of DWI in Texas, Bexar County, and San Antonio, as well as an exceptionally high rate of multiple DWI arrests.
- The average blood alcohol concentration (BAC) of those arrested in Bexar County is .151, nearly twice the legal limit of .08.
- The rate of DWI arrests in San Antonio have increased on average 8% per year since 2005
- Arrests for multiple DWIs have exceeded 1,500 annually since 2007 in Bexar County.
- Of the first 500 DWI offenders entering probation since January 2014, 65% of individuals were repeat offenders.
- Hispanics make up the majority DWI/DUI felony convictions for multiple DWI in Bexar County and their average sentences are 4 years in length.

Key Findings on the Consequences of Alcohol Use

- In 2011 Texas had the highest rate of alcohol related crash fatalities
- The number of alcohol related motor vehicle crashes exceeds those of surrounding counties.
- The majority of the DWI offenders surveyed reported experiencing severe financial, work and medical problems as a result of alcohol use.

Key Findings on Alcohol Consumption Patterns

- Alcohol abuse is a concerning public health issue in Bexar County and RHP Region 6.
- Heavy and binge alcohol use behaviors among residents of Bexar County exceed that of Texas and the United States
- The prevalence of alcohol use in both females and males and among Whites and Hispanic is higher in Bexar County compared to the prevalence in Texas.
- Bexar County and San Antonio MSA have consistently shown a higher percentage of population at risk for heavy alcohol consumption than in the state of Texas and the U.S.
- There are greater numbers of binge drinkers in Bexar County and San Antonio MSA than in the state of Texas and the U. S.
- The majority (96.7%) of DWI offenders surveyed met clinical diagnosis for an alcohol use disorder, the majority meeting criteria for dependence.

Key Findings on Substance Abuse Treatment

- Alcohol is the most common form drug leading to entry into substance abuse treatment
- Access to treatment is limited, with less than 1,400 adults to receive outpatient treatment and 1,914 to receive inpatient treatment funded by DSHS
- Substance abuse treatment rates are low, with barely half completing their program
- Of the DWI offenders surveyed, 12 step programs were the most common type of alcohol use treatment that they had attended.

Key Findings on Factors that Influence Treatment completion

- The DWI offenders surveyed reporting relatively high rates of perceiving both distal and proximal negative consequences as a result of their alcohol use
- DWI offenders within the correctional residential facility were further along in their change process than those in the community, with 37.3% of the community sample not currently ready to change their drinking.

Key findings on Treatment Needs (Non-Substance use)

- In 2011, psychiatric disorders counted for the highest proportion of hospitalizations in Bexar County
- Slightly higher proportion of Bexar County adults than Texas adults reported that they experienced five or more days of poor mental health (including stress, depression, or emotional problems) in the past 30 days and Whites reported a higher percentage of five or more days of poor mental health compared to Hispanics.
- Of the DWI offenders surveyed, 26% reported having a psychiatric diagnosis but yet 61% of those diagnosed were not receiving treatment
- Slightly more Bexar County adults than Texas adults reported that they experienced five or more days of poor physical health in the past 30 days and Hispanics reported a higher percentage of five or more days of poor physical health compared to Whites.
- Of the DWI offenders surveyed, over 35% reported chronic medical conditions but yet 40% of those were not receiving treatment

Key Findings on Health Care Usage

- The majority of DWI offenders surveyed had no primary care physician and rely primarily on the emergency department for treatment
- In 2012, 19% of Bexar County respondents reported that they had delayed seeking medical care because of cost in the past year, a slightly lower rate than for Texas.
- In 2012, Bexar County residents with less than a high school education and those with annual household incomes less than \$25,000 were most likely to have delayed medical care in the past year due to cost.
- Among racial/ethnic groups, Hispanics were more than twice as likely as Whites to delay medical care.

Key Findings on Treatment Resources

- The number of Federally Qualified Health Centers to serve indigent or underinsured individuals is lower in Bexar County compared to Texas and the United States.

Conclusion

As this community needs assessment has shown, complex factors are influencing rates of general health, mental health, and legal problems related to problematic alcohol use in this region. Ethnicity, education level, income, and the dearth of treatment options seem to play a significant role in the problems Bexar County and RHP 6 are experiencing. The prevalence of arrests for Driving While Intoxicated, for multiple DWI offenses, and the number of alcohol related vehicular fatalities in this geographic area exceed that of the prevalence in all of Texas and of the United States. The needs for interventions that have been shown to have demonstrated efficacy are extremely important to address the needs of this difficult to treat alcohol abusing population.

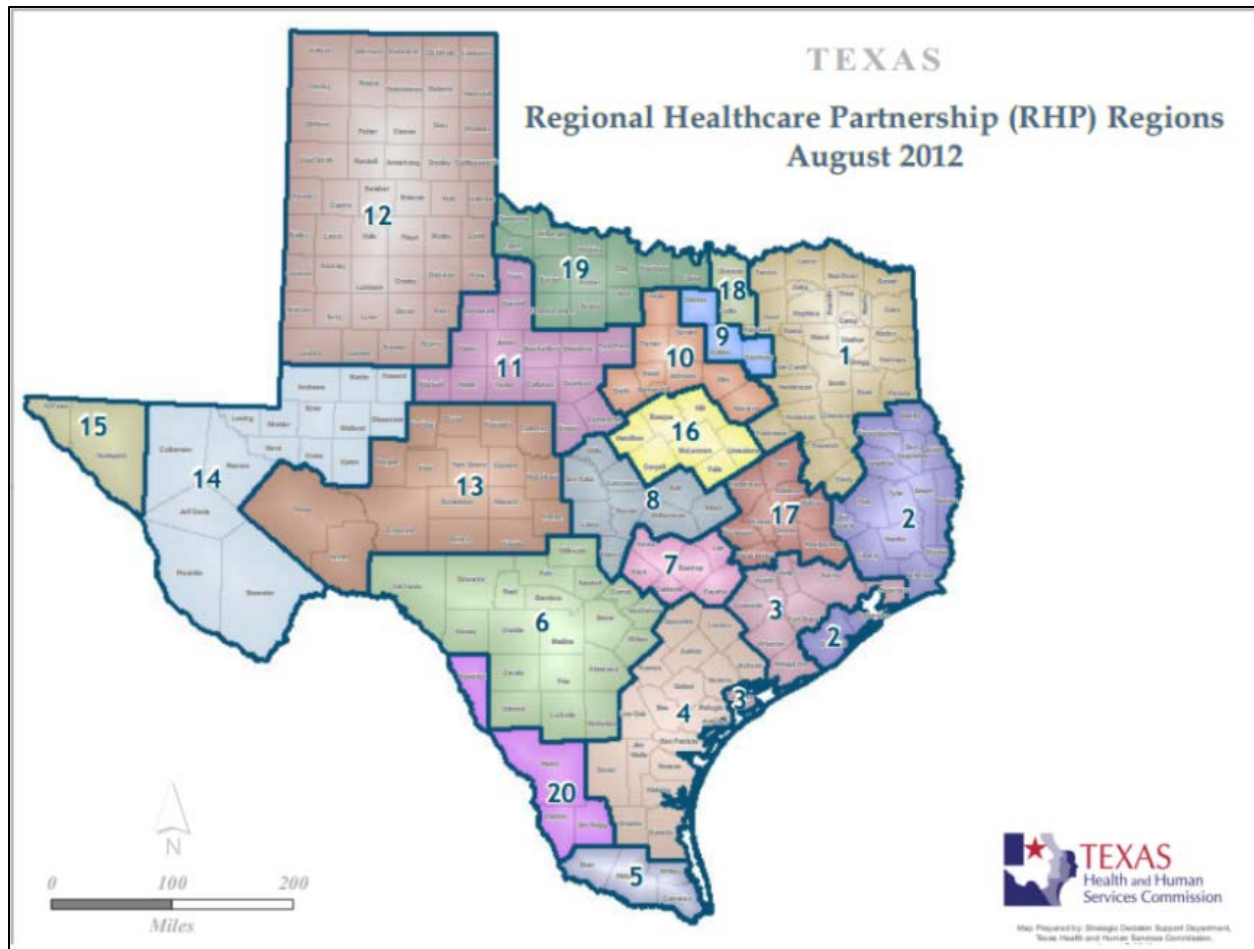
A comprehensive, integrated, public health approach to the delivery of early intervention and treatment services for persons with alcohol use disorders, as well as those who are at risk of developing alcohol use disorder, is warranted for this population. In addition, a combination of interventions that are considered to be the “gold standard” treatments for substance use disorders, when implemented with fidelity will promote the most favorable outcomes.

GEOGRAPHICAL AREA

Texas Regional Health Care Partnerships

The State of Texas was divided into 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. The mission of the RHPs are to promote system transformation that improved access, quality, cost-effectiveness, and coordination. This project is conducted as a component of RHP 6 (shown in green in the lower center of the of Figure 1 below).

Figure 1. Regional Healthcare Partnership (RHP) Regions

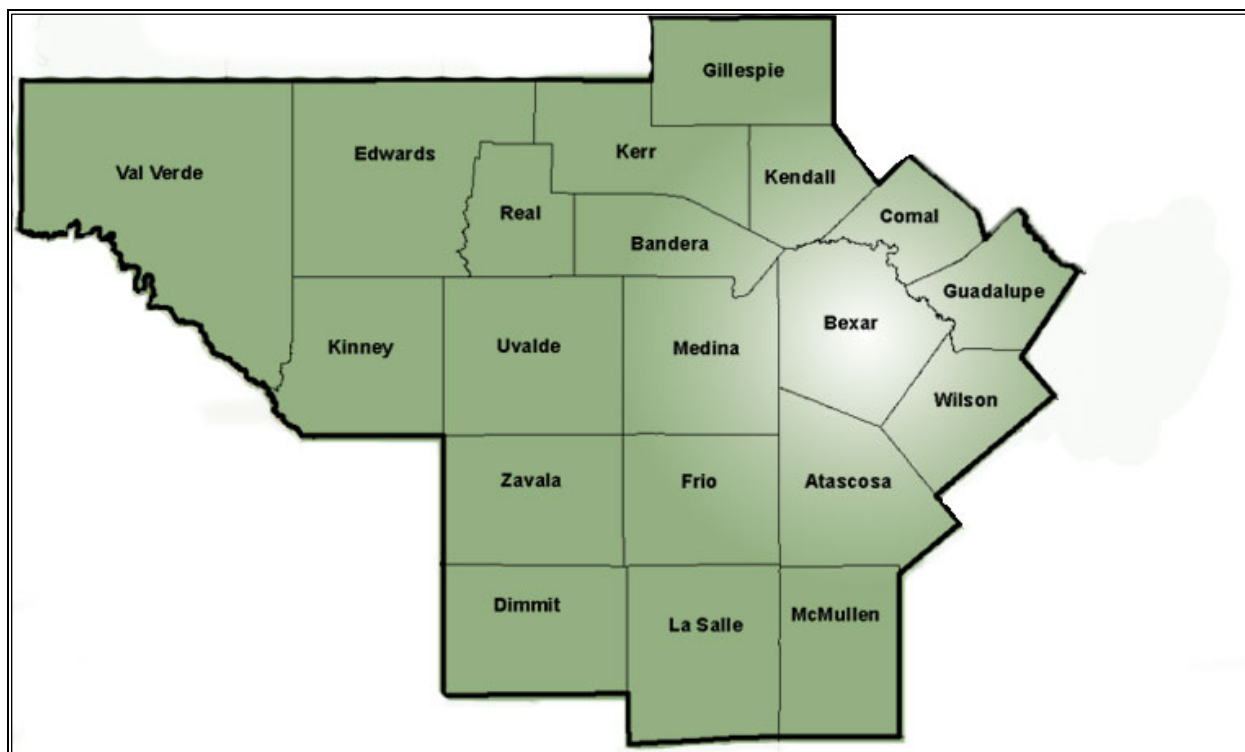


Regional Health Care Partnerships 6

The current project is funded and conducted as part of RHP 6. RHP 6 is anchored by 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.

The region 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 (see Figure 2). This region services 2.3 million residents.

Figure 2. Counties within RHP 6



San Antonio and Bexar County

The anchor and performance site of the current project are set in Bexar County which is the population center of RHP 6. Bexar County is the 4th largest county in Texas and consists of 27 cities and municipalities of which San Antonio is the county seat. The 2012 population estimate of San Antonio is 1,382,951, which is a 4.2% increase, compared to a 3.6% increase for the state of Texas during time period between 2010 and 2012 (see Table 1). Bexar makes up 79% of RHP 6 in terms of population density and San Antonio, the largest metropolitan area within Bexar County makes up 76% of the county.

As the central region of the San Antonio Metropolitan Statistical Area (MSA), Bexar County serves as an area of social and economic integration for its adjacent counties within the MSA – Kendall, Bandera, Medina, Atascosa, Wilson, Guadalupe and Comal. The table below (Table 1, below) shows the increasing population in Bexar County, San Antonio, and Region 6 and the percentage of the population that is 18 years and older

(San Antonio Council on Alcohol and Drug Abuse, 2011; Texas Workforce Commission, 2013).

Table 1. Population San Antonio, Bexar County, RHP 6

| | Population 2010 | Estimated Population 2012 | Percent of Population Adults |
|-------------|--------------------|---------------------------------|------------------------------------|
| San Antonio | 1,327,407 | 1,382,951 | 73.2% |
| Bexar | 1,714,773 | 1,785,704 | 73.5% |
| RHP 6 | 2,260,169 | 2,441,298 | 76.5% |

Source: San Antonio Council on Alcohol and Drug Abuse, 2011; Texas Workforce Commission, 2013

Bexar County Demographic Characteristics

In Bexar County and San Antonio the majority of the population is Hispanic, the majority of those Hispanics (59%) are over the age of 32 and have a high school education or more (Table 2).

Table 2. Bexar County Demographic Characteristics, 2009-2011

| | Bexar County | Texas |
|------------------------------------|--------------|------------|
| Total Population | 1,721,781 | 25,243,311 |
| % Hispanic | 59% | 38% |
| % Male | 49.0% | 49.6% |
| Median age (years) | 32.8 | 33.6 |
| Educational Attainment | | |
| Population 25 years and over | 1,065,778 | 15,772,881 |
| Less than high school diploma | 18.2% | 19.4% |
| High school graduate* | 24.5% | 25.5% |
| Some college or associate's degree | 31.5% | 29.1% |
| Bachelor's degree | 16.5% | 17.4% |
| Graduate or professional degree | 9.4% | 8.6% |

*High school graduate includes equivalency

Source: United States Census Bureau (2009-2011)

Bexar County Labor Force

The majority of those over 16 years of age were in the labor force (65.3%) in 2011 according to the American Community Survey. The median household income in 2011 was \$48,053 for Bexar County, which was slightly less than for the state as a whole (\$50,266). Among those in the labor force, the unemployment rate was 5.4%. Rates were comparable between the county and the state as a whole.

A substantial proportion of the labor force is employed with the Department of Defense. According to the 2009-2011 American Community Survey, the number of Armed Forces personnel that reside in Bexar County is estimated to be 1.9% of the labor force or 25,312 persons. The remainder of San Antonio's Department of Defense workforce is civil servants and subcontractors. Table 3 below shows the labor force comparison of Bexar County, and the state of Texas.

Table 3. Bexar County Labor Force Participation, 2009-2011

| Employment Status | Bexar County | Texas |
|--------------------------------|--------------|------------|
| Population 16 years and over | 1,307,468 | 19,117,836 |
| Percent In labor force | 65.3% | 65.4% |
| Civilian labor force | 63.3% | 64.8% |
| Employed | 58.0% | 59.3% |
| Unemployed | 5.4% | 5.5% |
| Military & Defense labor force | | |
| Civilian Military Contractors | 8.5% | 8.5% |
| Armed Forces | 1.9% | 0.6% |

Source: United States Census Bureau (2009-2011).

Bexar County Employment by Sector

Bexar County has a diverse employment landscape. The largest employment sectors include Government, Education and Health Services, and Leisure and Hospitality. From 2012 – 2013 there was growth in employment across all sectors except for Professional and Business and Financial Activities. The largest gains by percentage were in Information Technology and by number of jobs was Government (+ 2,500 jobs).

Table 4. Bexar County Employment by Sector

| Industry | August 2012 | August 2013 | Change 2012 - 2013 |
|--|-------------|-------------|--------------------|
| Government | 154,200 | 156,700 | + 1.62% |
| Education and Health Services | 134,700 | 135,300 | + 0.45% |
| Leisure and Hospitality Services | 116,000 | 117,300 | + 1.12% |
| Professional, Business, & Other | 109,000 | 108,700 | - 0.28% |
| Retail Trade | 97,600 | 98,800 | + 1.23% |
| Financial Activities | 78,500 | 71,100 | - 9.43% |
| Transportation, Warehouse, & Utilities | 22,100 | 22,500 | + 1.81% |
| Information Technology | 20,100 | 20,800 | + 3.48% |

Source: Workforce Commission, 2013

Poverty Rates

A substantial proportion of the Bexar Population has low income status. The proportion (almost 40%) of Bexar County residents at or or below 200% of the Federal Poverty Level (FPL) is higher than Texas overall and substantially higher than the national rate.

Table 5. Population of Bexar County, Texas and the United States in poverty

| Report Area | Total Population | Population \leq 200% FPL | Percent Population \leq 200% FPL |
|---------------|------------------|----------------------------|------------------------------------|
| Bexar County | 1,647,714 | 643,622 | 39.06% |
| Texas | 24,173,124 | 9,184,328 | 37.99% |
| United States | 298,788,000 | 97,686,536 | 32.69% |

FPL = Federal Poverty Level

Source: United States Census Bureau, 2012

The prevalence of poverty between Bexar County and Texas are relatively similar, with Bexar County slightly below the poverty rates for Texas in general. The one exception is the 65+-year-old group, in which Bexar County has slightly more of the retiree-aged population in poverty compared to Texas. Although Bexar County and Texas are comparable, the national poverty rate in 2012 was 14.3% (United States Census Bureau, 2012), over 2% less than the poverty rate in Texas and Bexar County. Poverty rates broken down by family-status can be found on Table 6.

Table 6: Texas and Bexar County Poverty Rates

| Poverty Rates* | Texas | Bexar County |
|--|-------|--------------|
| All families | 13.8% | 13.7% |
| With related children under 18 years | 20.4% | 19.7% |
| With related children under 5 years only | 20.2% | 19.2% |
| Married-couples | 7.9% | 7.2% |
| With related children under 18 years | 11.7% | 10.1% |
| With related children under 5 years only | 9.8% | 8.1% |
| Female head of householder | 33.2% | 31.3% |
| With related children under 18 years | 41.6% | 39.0% |
| With related children under 5 years only | 45.9% | 43.6% |
| All Individuals | 17.8% | 17.5% |
| Under 18 years | 25.5% | 25.0% |
| Related children under 18 years | 25.3% | 24.7% |
| Related children under 5 years | 28.8% | 27.3% |
| Related children 5 to 17 years | 23.9% | 23.7% |
| 18 years and over | 14.8% | 14.7% |
| 18 to 64 years | 15.4% | 15.1% |
| 65 years and over | 11.3% | 11.9% |
| People in families | 16.1% | 15.7% |
| Unrelated individuals 15 years and over | 26.8% | 26.5% |

*Poverty Rates (for families and people for whom poverty status is determined)

Source: United States Census Bureau, 2012

HEALTHCARE COVERAGE

Healthcare Insurance Rates

To assess the extent of insurance coverage, Bexar BRFSS respondents were asked if they currently had any kind of health coverage (including private insurance, military insurance, or publicly-funded insurance programs such as Medicare or Medicaid). In 2012, 27.4% of Bexar County respondents were uninsured, a rate slightly lower than that for the state of Texas (30.6%; Texas Department of State Health Services, BRFSS, 2012).

Health insurance rates among Bexar County adults with DWI are much lower than the general population. In our survey of 119 adults with at least one DWI, nearly two thirds had no health insurance and this proportion is likely higher since over 7% of the sample did not know how their health care could be paid for (see Table 7).

Substance abuse treatment is covered as part of Medicare, Medicaid, Service Connected and CHAMPUS. However, substance abuse treatment coverage varies across different vendors and types private health insurance. Among those with Private health insurance in this group, 31.6% knew that their insurance covered substance abuse treatment and 15.8% had no substance abuse coverage. The majority (52.6%) of the sample do not know whether their insurance covered substance abuse coverage.

Table 7. DWI Offender Health Insurance Rates

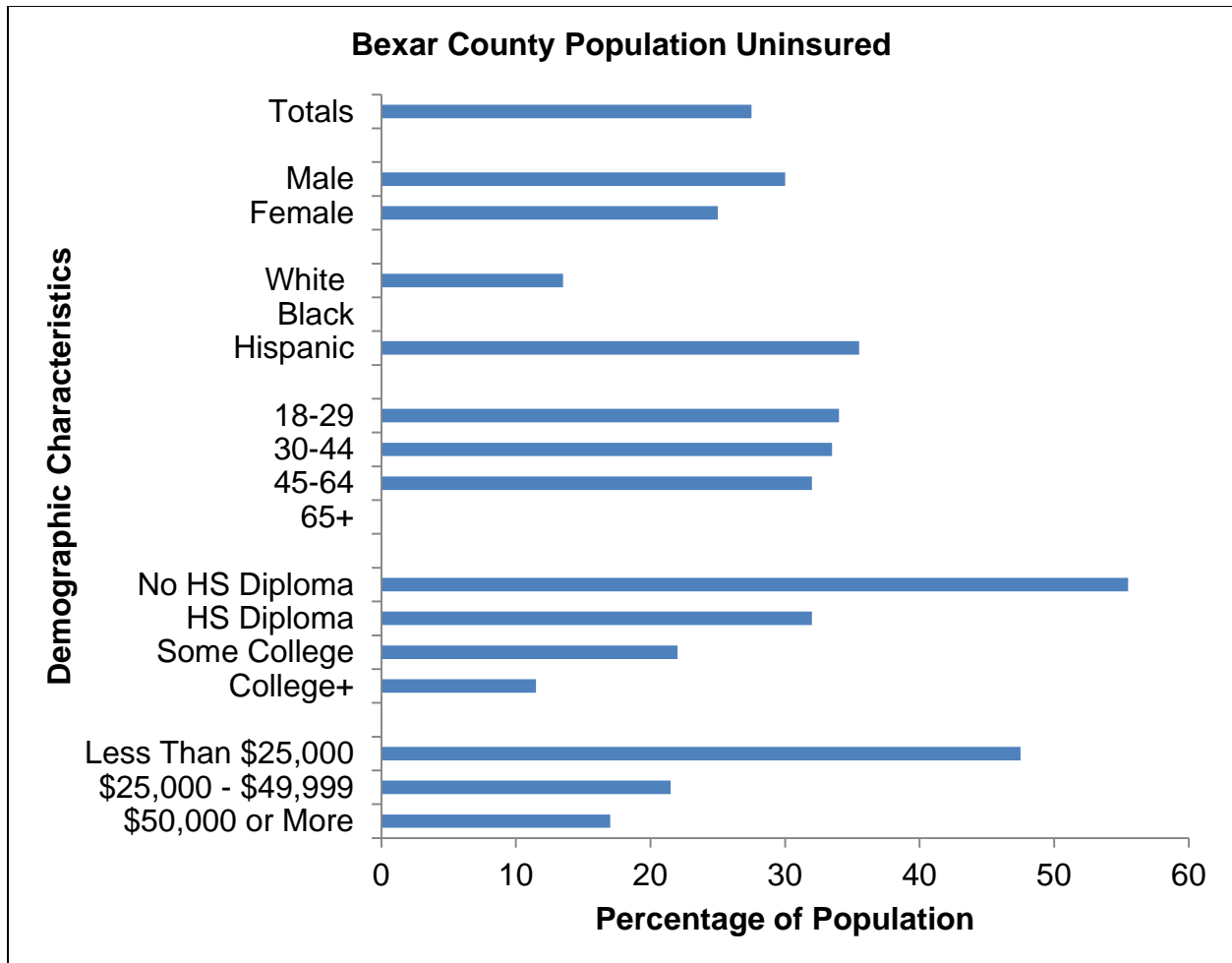
| Type of Health Coverage | Total (n=119) |
|-------------------------|------------------|
| No Insurance | 61.9% |
| Private insurance* | 16.1% |
| Medicare | 5.1% |
| Medicaid | 4.2% |
| Service Connected | 4.2% |
| CHAMPUS** | 0.8% |
| Don't know | 7.6% |

** Civilian Health and Medical Program for Uniformed Services (CHAMPUS).
Source: NRLC, 2014

Health Insurance Rates by Demographic Group

Rates of health insurance vary by demographic. Over twice as many Hispanic adults as White adults in Bexar County were uninsured (33% vs. 14%, respectively). Males in Bexar County were slightly more likely to be uninsured (30%) than females (25%). Insurance status varied substantially by education and household income. While 11% of college graduates reported having no insurance, 56% of adults without a high school diploma were uninsured in Bexar County. Similarly, 48% of adults with a household income less than \$25,000 per year reported that they did not have insurance, compared to 17% of those with a household income more than \$50,000.

Figure 3. Population uninsured (%), U.S., Texas, and Bexar County, 2006-2012



Note: No data for a subcategory denotes a sample size that was too small

Source: Center for Health Statistics, 2012

Access to Health Care

The percentage of the underserved population in Bexar County is over 12% greater than that of Texas, and the percentage also exceeds that of the United States (Table 8). Furthermore, Bexar is the most heavily populated county in RHP 6 with the greatest number of individuals living in poverty and receiving Medicaid services.

Table 8. Underserved populations: Bexar County, Texas, and United States, 2012

| Report Area | Total Population | HPSA Designation Population | Underserved Population | Percent of Total Population Underserved | Percent of Designated Population Underserved |
|---------------|------------------|-----------------------------|------------------------|---|--|
| Bexar County | 1,716,850 | 356,008 | 139,167 | 8.11% | 39.09% |
| Texas | 25,217,686 | 5,182,492 | 1,380,588 | 5.47% | 26.64% |
| United States | 312,559,544 | 54,147,548 | 19,267,501 | 6.16% | 35.58% |

Source: US Department of Health & Human Services, 2013

DRIVING WHILE INTOXICATED (DWI)

Texas and Bexar County DWI Characteristics

Texas has one of the highest rates of DUI/DWI arrests in the nation, second only to California (Texas Department of Public Safety [TDPS], 2012). There has been increasing prevalence of Drinking While Intoxicated/Driving Under the Influence arrests in the state of Texas in the past several years with 89,256 in 2012, a 1.8% increase over the number of arrests in 2011 which was 87,644 (TDPS). Preliminary data shows that 2013 numbers will exceed the previous years.

Within Bexar County, 38 is the mean age for persons arrested for DWI. The average blood alcohol concentration (BAC) of those arrested is .151, nearly twice the legal limit of .08 (Bexar County Sheriff's Office).

Table 9 shows characteristics of DWI offenses, arrests and citations during the past 7 years. The table shows that in the 10 months of 2013, greater than 1,500 DWI arrests were made for repeat offenses.

Table 9. DWI characteristics Bexar County 2007-2013

| Drivers | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013* |
|--------------------------|------|------|------|------|------|------|-------|
| BAC \geq .08 | 3420 | 3608 | 3866 | 4425 | 3758 | 3687 | 2897 |
| Open Container | 482 | 465 | 488 | 540 | 461 | 317 | 290 |
| 2nd DWI Offense | 1028 | 926 | 967 | 1072 | 992 | 1034 | 936 |
| 3rd DWI Offense | 585 | 587 | 597 | 636 | 579 | 644 | 576 |
| DWI with child in car** | 23 | 98 | 105 | 126 | 113 | 140 | 117 |
| Intoxicated Assault | 52 | 50 | 56 | 57 | 43 | 47 | 26 |
| Intoxicated Manslaughter | 16 | 13 | 15 | 16 | 7 | 13 | 14 |

Note: * indicates partial data collected from Jan 1 – Oct 31 2013. On average, November and December arrests in Bexar County are approximately 18% of the annual DWI arrests and will likely be comparable to the 2012 totals.

**DWI with child under age of 16 is a felony offense

Source: Bexar County District Attorney Office, 2014

Continued Driving after DWI

In our survey of 119 adults with DWI's many continued to drive even after losing their license (NRLC, 2014). Among those with a DWI survived 46.7% of those in the community, and 76.3% of those in a correctional residential treatment facility lost their drivers license because of their DWI conviction. Among those who lost their license, 39.3% of the community survey and 33.3% of the correctional residential treatment survey reported that they continued to drive even after losing their license.

BASELINE RATES OF DWI RECIDIVISM

Baseline rates of DWI recidivism vary by where the targeted intervention group is sampled from. We calculated Bexar County Court Record rates of recidivism from the first 500 DWI offenders entering probation this year (2014). Among these over 65% of individuals and 88% of DWI convictions were recidivist (i.e. a repeat DWI after the first conviction; Right column Table 10). Probation is one of our planned recruitment sites.

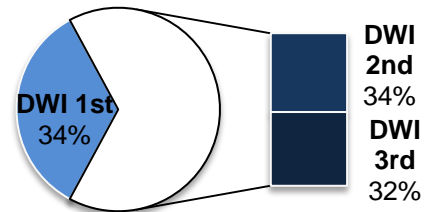
Among those still incarcerated and receiving substance use treatment for DWI (see Residential column), nearly 60% of individuals and 50% of convictions were recidivist. Finally, among those from the general community population who have at least 1 DWI, 40% of individual offenders have had subsequent DWI arrests and 65% of the DWI arrests are repeat offences (Source: NRLC, 2014). This range of recidivism rates are presented to represent the characteristics of the different offender populations that we anticipate providing treatment services to.

Table 10. DWI Recidivism

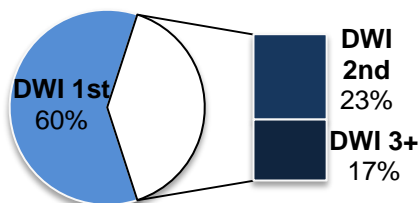
| Recidivism | Community (n= 60) | Residential (n=59) | Bexar County (n=500) |
|---|----------------------|-----------------------|-------------------------|
| Person Level Recidivism | | | |
| Individuals with >1 DWI conviction | 24 | 35 | 329 |
| Per person Recidivism Rate | 40.00% | 59.30% | 65.80% |
| Arrest Level Recidivism | | | |
| Total Number of DWI Convictions | 103 | 117 | 988 |
| Convictions after 1 st offense | 67 | 58 | 877 |
| Conviction Recidivism Rate | 65.04% | 49.57% | 88.86% |

Figure 4. First, Second and Third DWI Convictions among Probation, Community, and Correctional Residential Treatment Sample

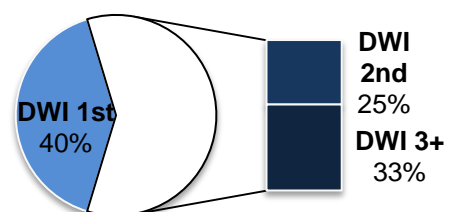
**Bexar County Court Records
DWI among Probations 2014**



**DWI Convictions among
Community Sample**



**DWI Convictions among
Residential Sample**

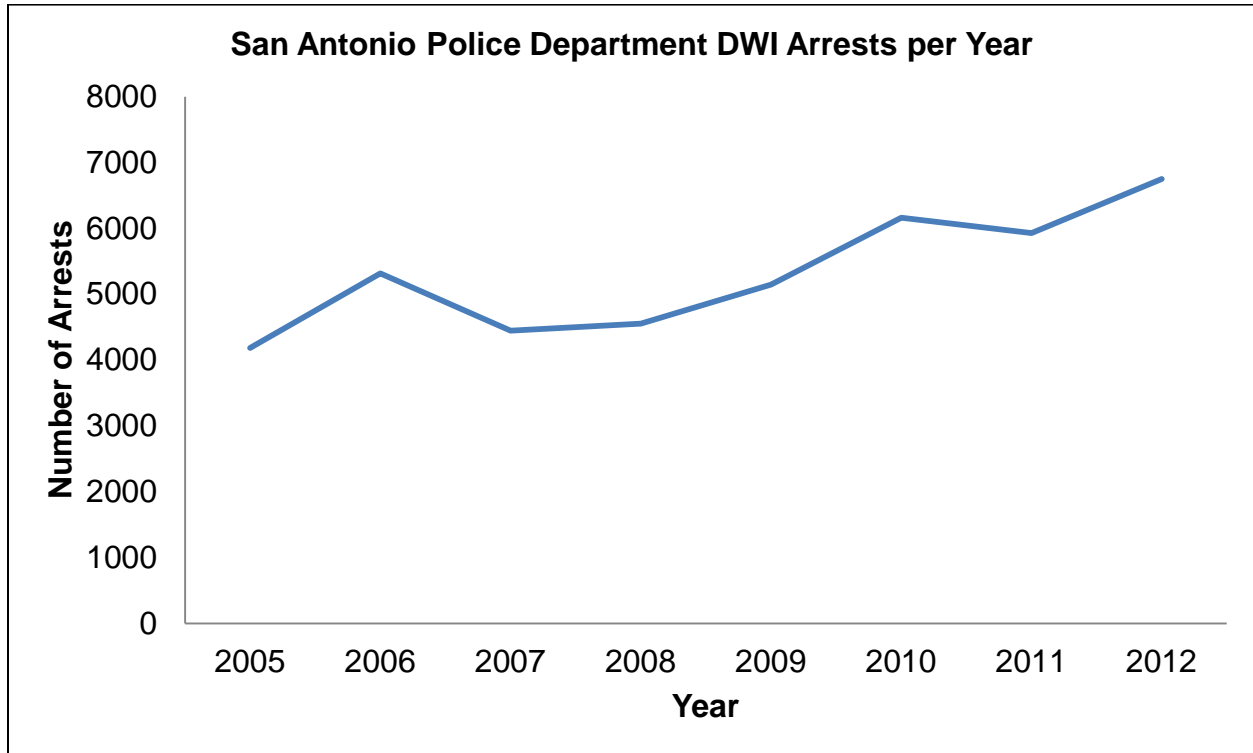


ARRESTS ACROSS TIME

Arrests by Year

The rate of DWI's are increasing. Examining the total number of arrests annually by the San Antonio Police Department (Figure 5), shows arrests have increased on average 7.86% per year. Arrests in 2012 were 13.85% higher than in 2011 and 61.25% higher than in 2007.

Figure 5. San Antonio DWI Arrests by Year



Source: San Antonio Police Department, 2013

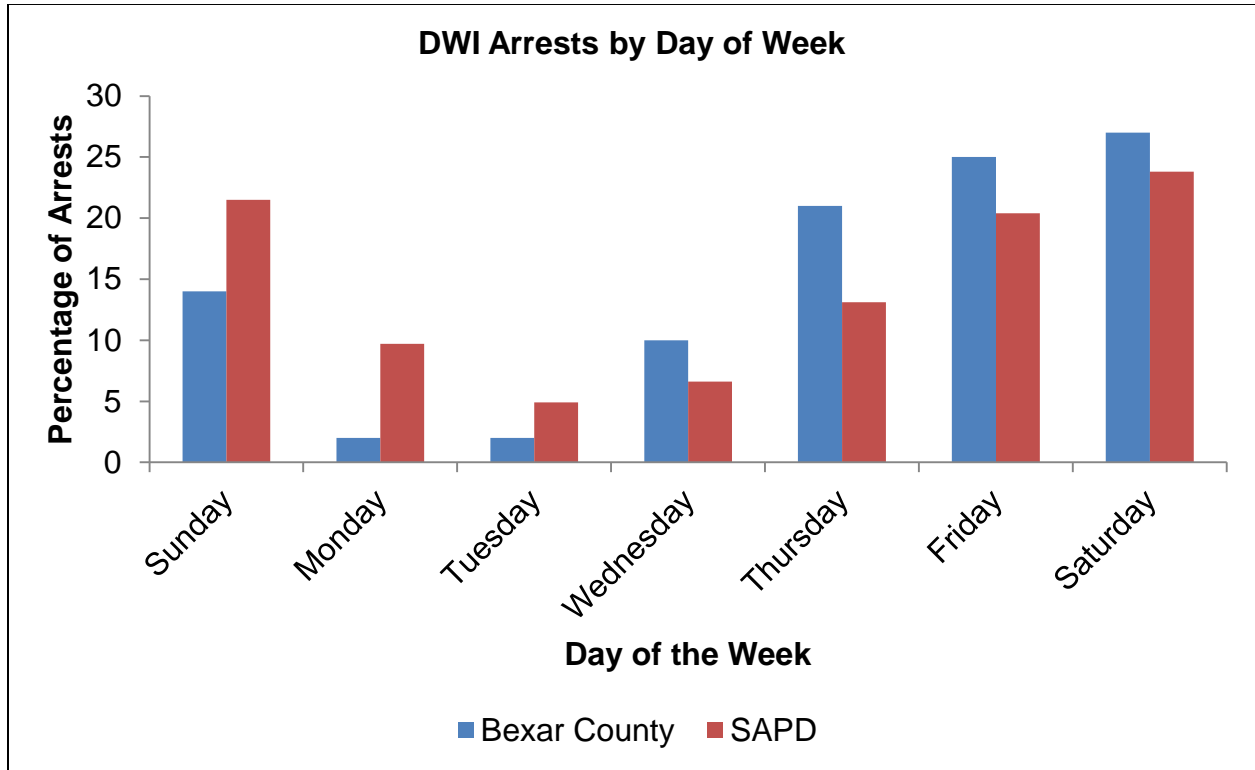
Arrests by Month

The rate of DWI's varies by month and jurisdiction. The Bexar County Sheriff's Office reports highest arrests occurring in January (10%) and May (10.6%): this is calculated from the 5-year average (years 2007-2011). In contrast, the San Antonio Police Department reports in August (9.1%) and November (9.5%) to be the highest arrest months (5-year average through 2010).

Arrests by Day of Week

DWI arrests peak during the weekend. Both the Bexar County Sheriff's Office and the San Antonio Police Department have substantially higher rates of arrest on Thursday through Sunday night (78.8% SAPD, 87% BCSO).

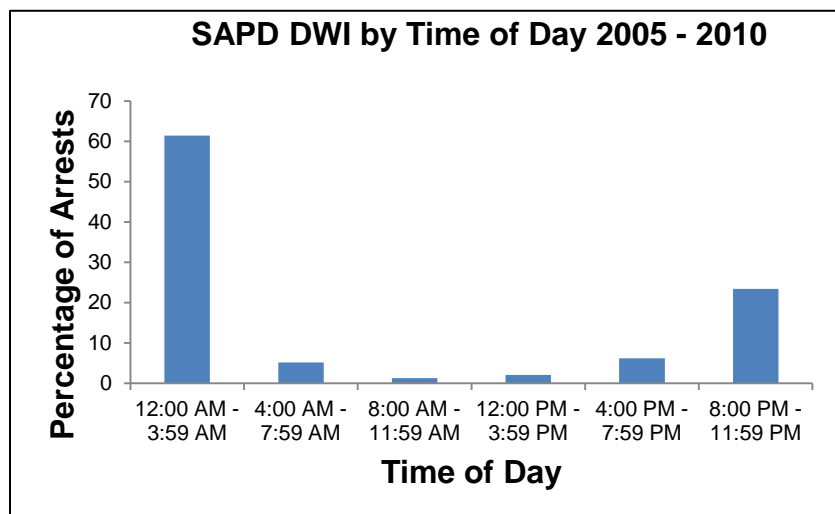
Figure 6. Bexar County DWI Arrests by Day of Week



Arrests by Time of Day

Not surprisingly, the majority of DWI arrests occurring during the night time hours. Nearly 85% of DWI arrests occur between the hours of 8:00pm and 3:59 am. Figure 7 shows 5 year average (ending in 2010) for the arrests by time of day conducted by the San Antonio Police Department.

Figure 7. San Antonio DWI Arrests by Time of Day



Racial/Ethnic Comparison of Felony DWI Convictions

Hispanic citizens represent the majority population of DWI felony convictions. In fact, the Hispanic conviction rate occurs at a higher rate than their proportion (59%) of the county population (Census Bureau's 3-Year American Community Survey estimates). Table 11 represents convictions of DUI/DWI offenders from 9/2012 to 8/2013. Please note that it represents incarceration information on convicted adult felons only which in this case represents convictions for 3 or more DWI/DUI offenses or driving with a child under 15 years of age.

Table 11. Bexar County Felony DWI Convictions by Race and Sentence

| | Convictions (n=344) | Average length of Sentence (years) |
|----------|------------------------|---------------------------------------|
| Black | 1.7% | 3 |
| White | 14.8% | 4 |
| Hispanic | 82.9% | 4 |
| Unknown | 0.6% | 3 |

Source: Texas Department of Criminal Justice, 2014

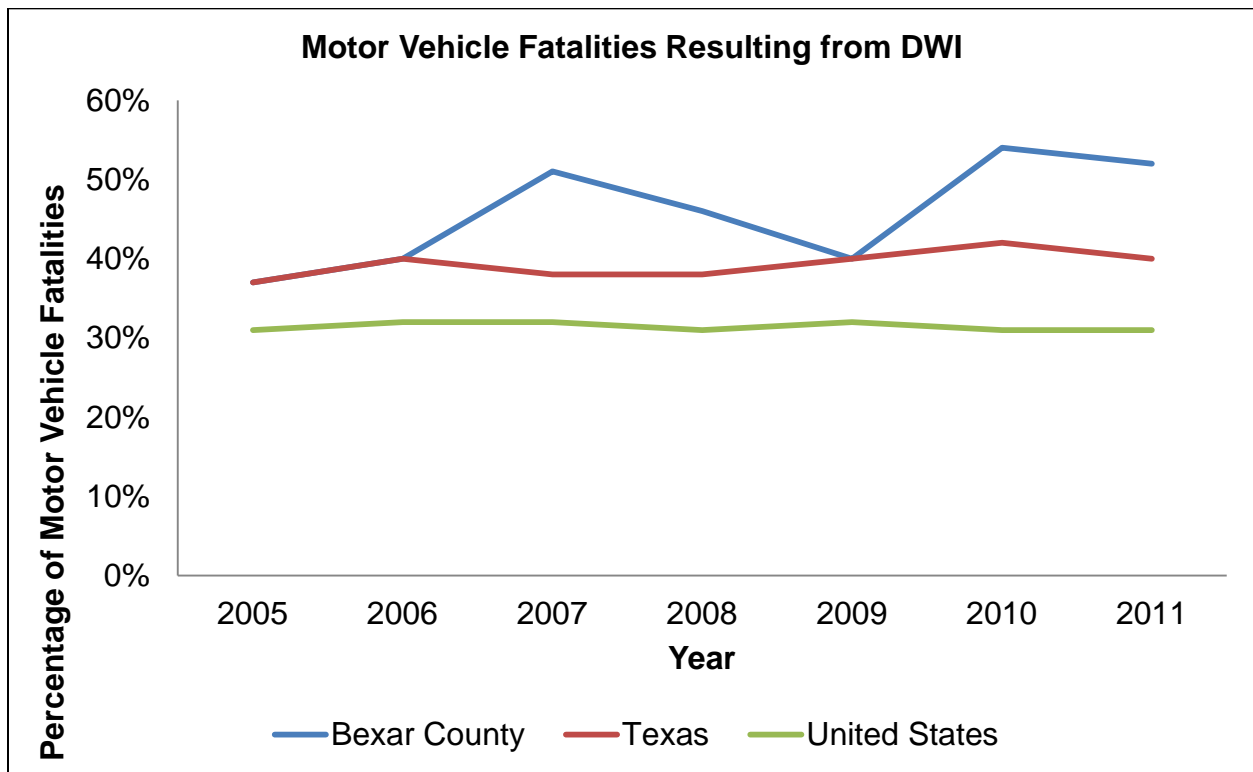
CONSEQUENCES OF DRIVING WHILE INTOXICATED

DWI Traffic Fatalities

Texas leads the nation in drunk driving deaths with 1,213 people fatalities reported in 2011 (National Highway Traffic Safety Administration [NHTSA], 2012). In 2011, Bexar County was in the lower third of counties within the state for number of alcohol-related crash fatalities, with a rate of 4.50 fatalities per 100,000 residents.

Figure 8 shows data from the NHTSA and illustrates Bexar County's alcohol-related crash fatality trend compared to that of Texas and the United States from 2005 through 2011. An alcohol-related crash fatality is defined as a fatality that resulted from a crash that involved at least one driver or motorcycle rider with a BAC of .08 or above. Although Bexar County had shown a 10% decrease in fatalities between 2007 and 2009, it has since spiked well above the state and national average in 2010 and 2011 (NHTSA).

Figure 8. Alcohol related motor vehicle fatality trends 2005-2011



Note: *Information contained in this report represents reportable data collected from Texas Police Officer's Crash Reports (CR-3) received and processed by the NHTSA. Source: National Highway Traffic Safety Administration, 2013

DWI Traffic Fatalities and Injuries by County in RHP 6

The number of alcohol related motor vehicle accidents in Bexar County far exceeds alcohol related accidents in its surrounding counties (see Table 12).

Table 12. Alcohol related motor vehicle crashes in Bexar and other RHP 6 counties, 2013

| County | Fatal Crashes | Deaths | Serious Injury Crashes | Serious Injuries | Other Injury Crashes | Other Injuries | Non-Injury Crashes | Unknown Severity Crashes | Total Crashes |
|--------------|---------------|-----------|------------------------|------------------|----------------------|----------------|--------------------|--------------------------|---------------|
| Atascosa | 1 | 1 | 15 | 15 | 4 | 6 | 23 | 0 | 43 |
| Bandera | 3 | 5 | 5 | 11 | 2 | 2 | 15 | 1 | 26 |
| Bexar | 50 | 60 | 308 | 419 | 301 | 483 | 893 | 181 | 1,733 |
| Comal | 4 | 5 | 23 | 27 | 12 | 21 | 72 | 2 | 113 |
| Gillespie | 2 | 2 | 8 | 14 | 2 | 3 | 14 | 1 | 27 |
| Guadalupe | 4 | 5 | 22 | 37 | 14 | 23 | 50 | 3 | 93 |
| Kendall | 1 | 1 | 6 | 10 | 2 | 4 | 9 | 2 | 20 |
| Medina | 1 | 1 | 17 | 30 | 4 | 6 | 21 | 2 | 45 |
| Wilson | 2 | 2 | 7 | 10 | 10 | 16 | 14 | 1 | 34 |

Source: Texas Department of Transportation, 2014

CONSEQUENCES OF ALCOHOL MISUSE

In our survey of consequences of alcohol misuse, the overwhelming majority of the sample reported severe consequences (particularly in areas employment and health). The majority of the sample reported severe consequences of all 3 domains (Source: NRLC, 2014).

Table 13. Experiencing Problems as a Result of Alcohol Use

| Area of Impairment | Total (n=119) |
|---------------------|---------------|
| Financial | 74.0% |
| Work | 96.0% |
| Medical | 95.0% |
| # of Areas Affected | |
| 1 Area | 4.2% |
| 2 Areas | 24.6% |
| 3 Areas | 71.2% |

Source: NRLC, 2014

ALCOHOL CONSUMPTION PATTERNS

The Behavioral Risk Factor Surveillance System (BRFSS) is the world's largest, on-going telephone health survey system. BRFSS survey data reveals alcohol consumption patterns to include any alcohol use, heavy drinking, and binge drinking. Data for these consumption patterns were examined and compared for the state of Texas and Bexar County. The percentage of the population age 18 and over that reported consuming at least 1 alcoholic drink in the last 30 days is shown to be considerably higher in Bexar County as compared to the state of Texas (57.4 % vs. 49.3). The prevalence of alcohol use in both females and males and among Whites and Hispanic is higher in Bexar County as compared to state percentages. Table 14 shows that the percentage of any alcohol use is higher in all demographic categories in Bexar County as compared to the state of Texas.

Table 14: Percentage of population (age 18 and over) in Bexar County and Texas that consumed at least 1 alcoholic drink in the last 30 days

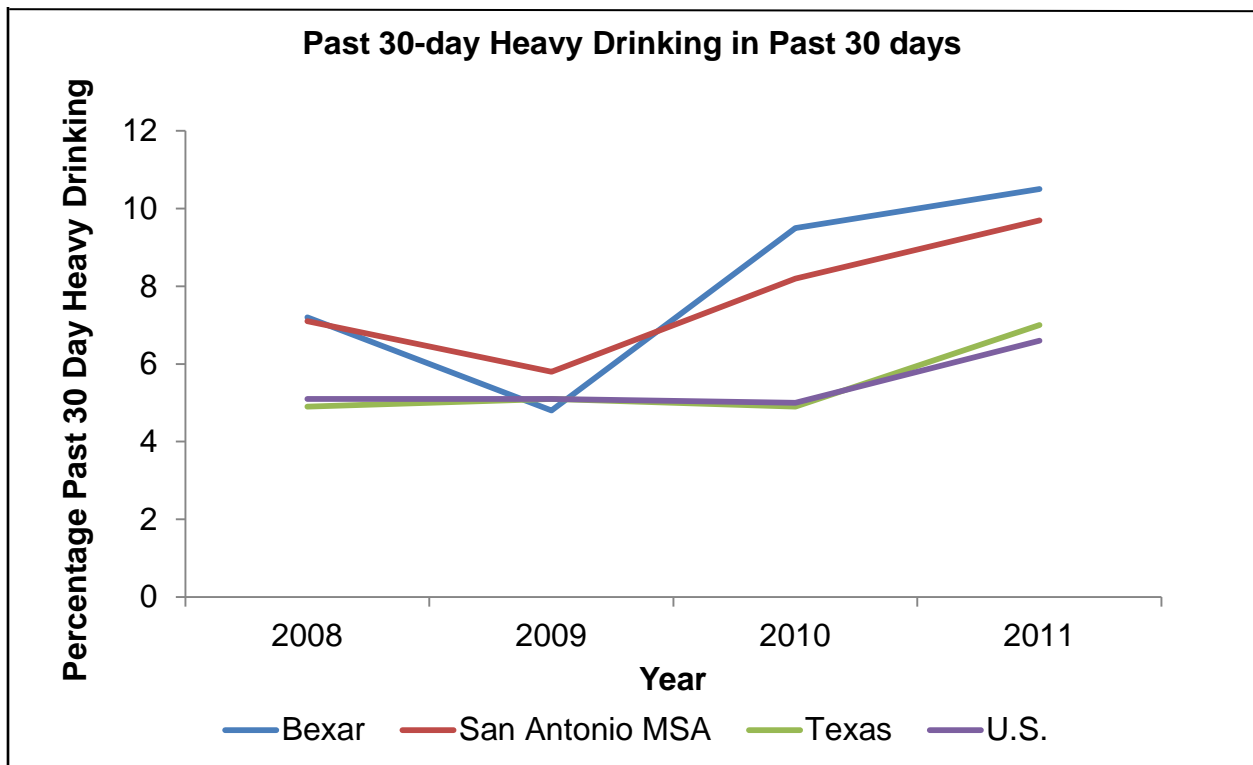
| | Sample Size | Bexar County % | Texas % |
|----------------------|-------------|----------------|---------|
| Totals | 8,904 | 57.4 | 49.3 |
| Gender | | | |
| <i>Male</i> | 3,615 | 64.1 | 58.6 |
| <i>Female</i> | 5,289 | 50.8 | 40.3 |
| Race/Ethnicity | | | |
| <i>White</i> | 5,316 | 68.7 | 57.0 |
| <i>Black</i> | 677 | (-) | 44.9 |
| <i>Hispanic</i> | 2,502 | 49.5 | 41.2 |
| <i>Other</i> | 277 | (-) | 41.1 |
| Age Group | | | |
| <i>18 - 29 Years</i> | 1,064 | 56.7 | 52.4 |
| <i>30 - 44 Years</i> | 1,875 | 61.0 | 52.8 |
| <i>45 - 64 Years</i> | 3,239 | 62.9 | 49.9 |
| <i>65+ Years</i> | 2,659 | 42.8 | 37.7 |

Source: Center for Health Statistics, 2012

Heavy Drinking

The Center for Disease Control (CDC) defines heavy drinking as consuming on average more than one drink per day for women and more than two drinks per day for men. BRFSS survey data from 2008 to 2011 reveals the percentage of respondents that reported past 30-day heavy alcohol consumption. Figure 9 below shows percentages for Bexar County, San Antonio MSA, the state of Texas, and the United States. Bexar County and San Antonio MSA have consistently revealed there is a higher percentage of population at risk for heavy alcohol consumption. In 2011, 10.5% of Bexar County adults reported heavy drinking, a rate higher than that of the state of Texas (7.0%) and the U.S. (6.6%).

Figure 9. Percentage reporting past 30-day heavy drinking in Bexar County, San Antonio Metropolitan Statistical Area, state of Texas, and US, 2008-2011



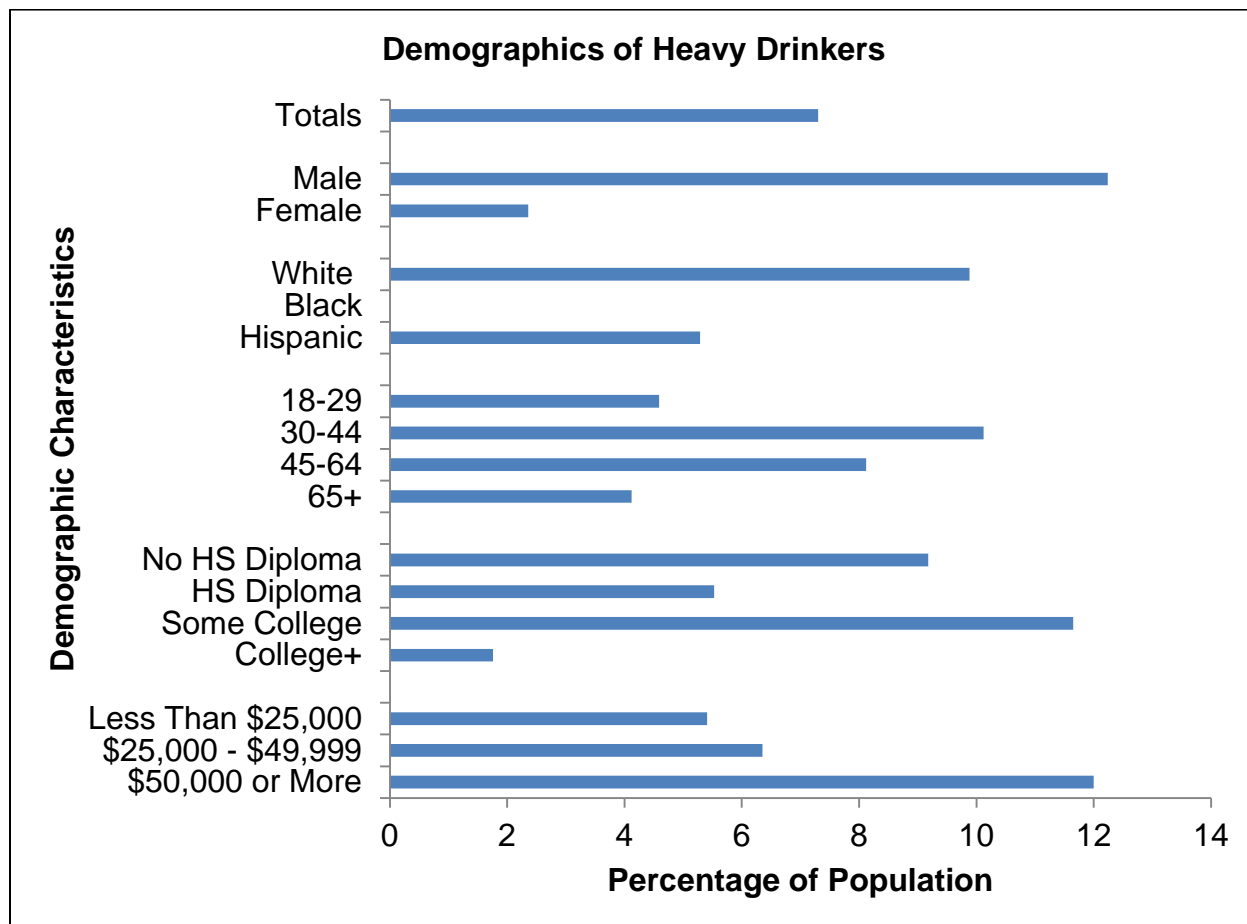
Note: San Antonio MSA includes: Atascosa, Bandera, Bexar, Comal, Guadalupe, Kendall, Medina, and Wilson counties.

Source: Centers for Disease Control and Prevention, 2011

Demographic Characteristics of Heavy Drinking, Bexar County

Figure 10 below shows demographic characteristics of those reporting heavy drinking in the last 30 days. Rates were substantially higher among Bexar county males than females (12% vs. 2%) and higher among Whites (10%) than Hispanics (5%). Rates also vary by age, education and household income level. Heavy drinking rates in Bexar County are lower for younger (18-29) and older residents (65 or older) and higher for those ages 30-64. A higher proportion of adults with annual household incomes over \$50,000 were heavy drinkers (12%) than those who income was less than \$25,000 per year (5%). Those with a college education or higher (2%) were far less likely to be heavy drinkers than those with lower levels of education.

Figure 10. Demographics of Adults Reporting Heavy Drinking in the Past 30 Days, Bexar County, 2012



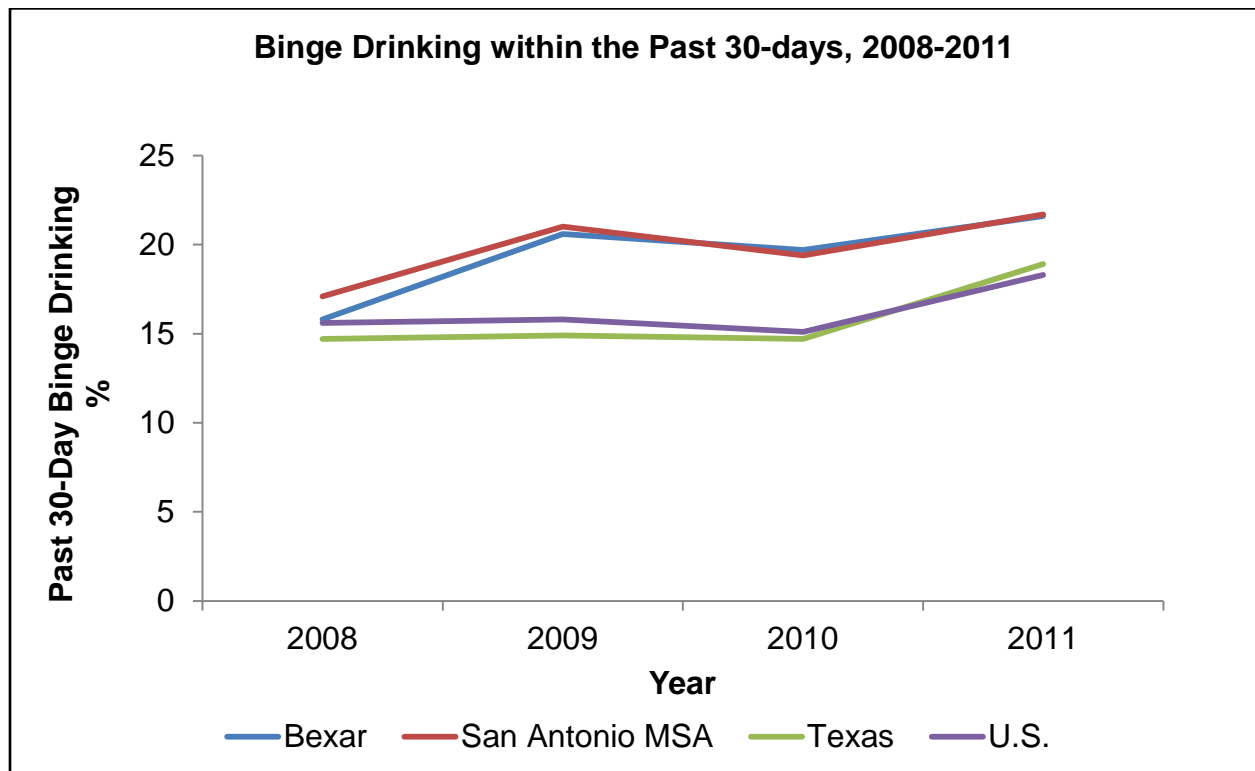
Note: No data for a subcategory denotes a sample size that was too small

Source: Center for Health Statistics, 2012

Rates of Binge Drinking

Binge drinking is defined as five or more drinks for men or four or more drinks for women on one occasion (Center for Health Statistics, 2012). According to BRFSS data there were consistently greater numbers of past 30-day binge drinkers from 2008 to 2011 in Bexar County and San Antonio MSA than in the state of Texas and the U. S. The local data shows comparable rates from 2009 to 2011 for past 30 day binge drinking rates; higher than both the state and national rates. While the state and national binge drinking rates follow each other almost exactly and have remained relatively constant in 2008, 2009, and 2010 (around 15%) the percentage jumped to over 18% in 2011, which was still less than the percentages for Bexar County and San Antonio which have maintained an average of about 21%.

Figure 11. Percentage reporting past 30-day binge drinking in Bexar County, San Antonio Metropolitan Statistical Area, state of Texas, and U.S, 2008-2011



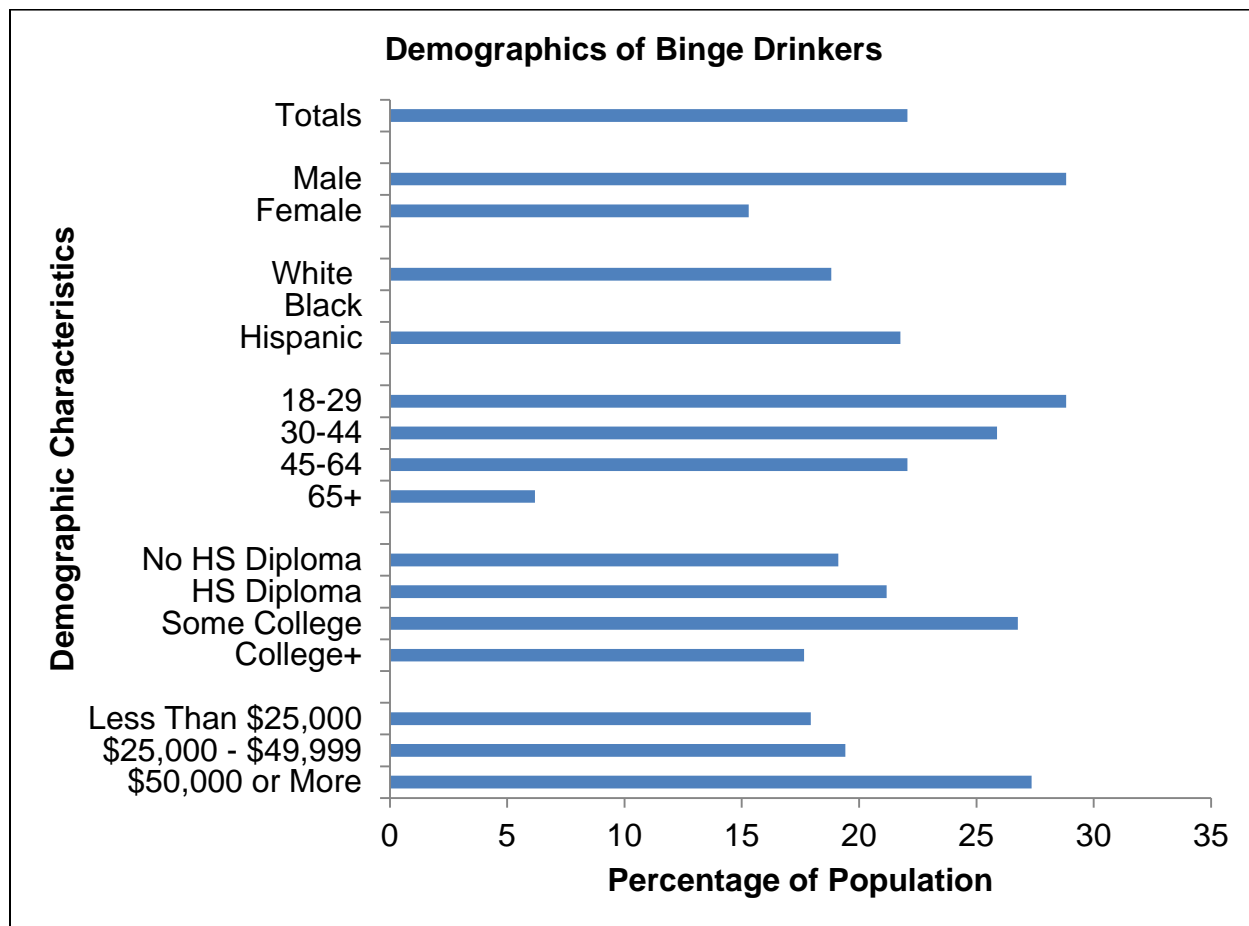
Note: San Antonio MSA includes: Atascosa, Bandera, Bexar, Comal, Guadalupe, Kendall, Medina, and Wilson counties.

Source: Centers for Disease Control and Prevention, 2011

Demographic Characteristics and Binge Drinking, Bexar County

Figure 12 below shows the rates of adults at risk for binge drinking varies substantially by demographic group. Binge drinking rates are substantially higher among Bexar county males (29%) than females (15%) and higher among Hispanics (22%) than Whites (19%). Rates of binge drinking declined with age and increased with income level. Binge drinking rates among adults in Bexar were highest among those 18-29 years old (29%) and declined over the age span to 6% of adults age 65 or older. Binge drinking was lower for respondents whose household income was less than \$25,000 (18%), and rose steadily over household income levels, reaching a rate of 27% for those with household incomes over \$50,000 annually.

Figure 12. Demographics of Adults Reporting Binge Drinking in the Past 30 Days, Bexar County, 2012



Note: No data for a subcategory denotes a sample size that was too small

Source: Center for Health Statistics, 2012

SUBSTANCE USE CHARACTERISTICS AMONG DWI OFFENDERS

Alcohol misuse often occurs in the context of other drug abuse. In our survey of adults with DWI(s), we find a high rate of comorbid substance use disorder; most commonly Cannabis Dependence and Cocaine Dependence. Alcohol and Substance Use Diagnoses were found together among nearly 42% of the community sample and 60% of the residential treatment sample.

Table 15. Prevalence of Substance Use Diagnoses

| | Community (n= 60) % (n) | Residential (n=59) % (n) | Total (n=119) %(n) |
|--|-------------------------------|--------------------------------|--------------------------|
| Substance Use Diagnoses | | | |
| Alcohol Use Disorder | 96.7% (58) | 96.6% (57) | 96.7% (115) |
| <i>Alcohol Dependence</i> | 67.2% (39) | 78.9% (45) | 73.0% (84) |
| Cannabis Use Disorder | 40.0% (24) | 40.1% (24) | 40.3% (48) |
| <i>Cannabis Dependence</i> | 50.0% (12) | 62.5% (15) | 56.3% (27) |
| Cocaine Use Disorder | 11.7% (7) | 27.1% (16) | 19.3% (23) |
| <i>Cocaine Dependence</i> | 57.4% (4) | 87.5% (14) | 78.3% (18) |
| Substance Use Diagnoses | | | |
| <i>Alcohol Use Disorder only</i> | 55.0% | 37.3% | 43.7% |
| <i>Alcohol + Other Substance Use Disorders</i> | 41.7% | 59.3% | 52.9% |
| <i>Substance Use Disorders without Alcohol</i> | 0.0% | 1.7% | 0.8% |
| <i>No Substance Use Disorder</i> | 3.3% | 1.7% | 2.5% |

Source: NRLC, 2014

SUBSTANCE ABUSE TREATMENT

Alcohol Treatment Utilization by DWI Offenders

In our survey of alcohol treatment among adults with DWIs, on average 79% had reported ever attending an alcohol treatment program (NRLC, 2014). In terms of treatment modalities, 29% attended Alcoholics Anonymous only (AA), which was more commonly paired with other forms of intervention (47% had attended both AA and other treatment programs).

Table 16. Use of Alcohol Treatment Programs

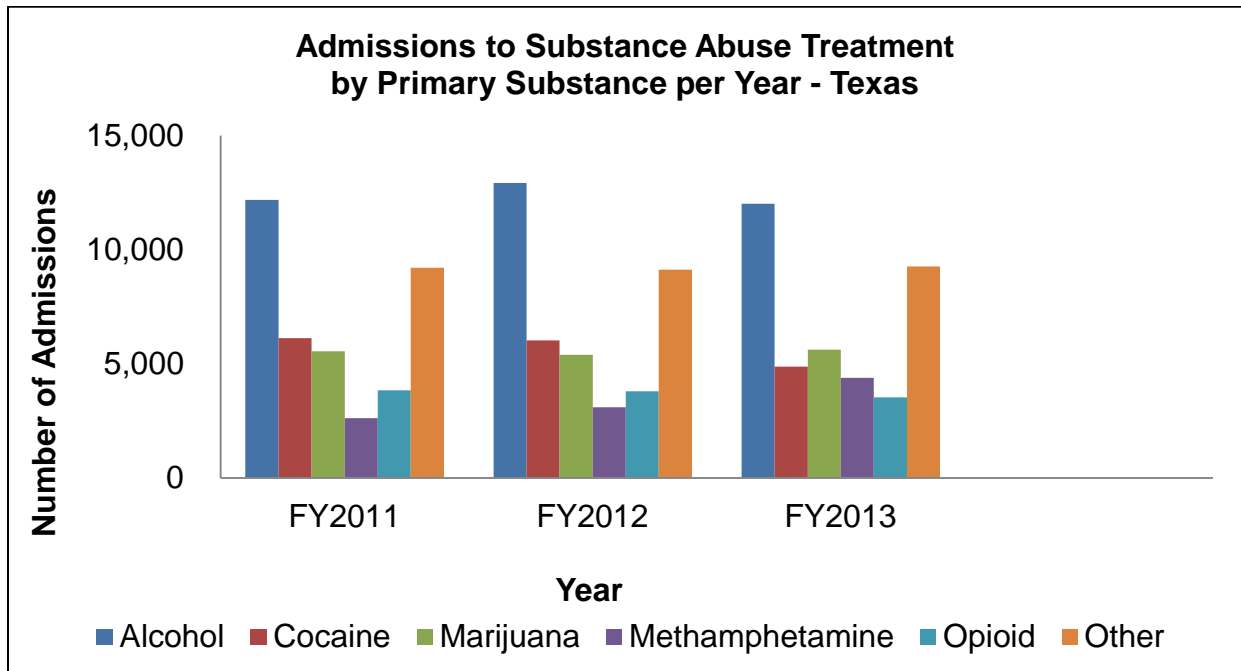
| Alcohol Treatment | Community (n= 60) | Residential (n=59) |
|-------------------------------|----------------------|-----------------------|
| Any Alcohol Treatment | 63.3% (38) | 94.9% (56) |
| AA only | 25.0% (15) | 32.2% (19) |
| Both AA and another treatment | 31.7% (19) | 62.7% (37) |
| Treatment other than AA | 6.7% (4) | 0.00% (0) |

Source: NRLC, 2014

Substance Abuse Treatment by Drug Class

Substance abuse treatment rates vary by the class or type of drug causing impairment. Alcohol is the most common drug leading to entry to substance abuse treatment in Texas. Alcohol treatment occurs 2.4 times the rate of cocaine treatment and 2.9 times the rate of opioid treatment in Texas in 2013. The relative prevalence of alcohol misuse and impairment was part of what lead to our focusing on designing a treatment program for low income adults with DWIs.

Figure 13. Treatment Admissions by Drug Class, Texas 2011 - 2013



Source: Texas Department of State Health Services, 2013a

Access to Substance Abuse Treatment

Access to substance use treatment is very limited. Less than 1,400 adults were funded by the Texas Department of State Health Services (DSHS) to receive outpatient substance use treatment and only 1,914 had funded inpatient treatment in Bexar County. Rates of outpatient treatment for men and women are comparable, but men have higher rate of residential treatment. While Bexar County is a majority Hispanic population (59%) and Hispanic's receive the majority of DSHS funded outpatient treatment slots (59.8%), they are under-represented in residential treatment (45.1%).

Table 17. The number of DSHS funded adults admitted to outpatient and residential substance abuse treatment programs in 2013 by gender

| | Bexar County | | Texas | |
|-------------|--------------|-------|--------|-------|
| | Men | Women | Men | Women |
| Outpatient | 717 | 700 | 9,010 | 7,119 |
| Residential | 1,188 | 726 | 10,793 | 8,122 |

Source: Texas Department of State Health Services, 2013b

Completion of Substance Abuse Treatment

Even among those fortunate enough to gain entry to substance use treatment, rates of successful completion of their program are low. Over 31,000 adults have been treated in each of the last 3 years, but barely half complete their treatment program and the trend, has been a declining rate of completion.

Table 18. Substance Abuse Treatment Completion Rates for Texas, 2011-2013

| | Number of Adults Treated | | |
|----------------------|--------------------------|--------|--------|
| | 2011 | 2012 | 2013 |
| Served | 31,627 | 31,206 | 31,103 |
| Treatment Completion | 56% | 53% | 52% |

Source: Texas Department State Health Services, 2013b

Because of the high rate of treatment drop out, we have designed our intervention to increase the likelihood of treatment completion, but using Motivational Enhancement Therapy and Contingency Management.

Motivational Enhancement Therapy is specifically designed to increase motivation and commitment to behavior change, thereby increasing treatment engagement. Treatment engagement improves completion rates.

Contingency Management provides incentives for treatment adherence, which is related to engagement.

FACTORS THAT IMPACT TREATMENT COMPLETION

Motivation to Quit Drinking Alcohol

In our assessment of low income adults with DWIs, we measured their motivation to quit drinking alcohol. Generally, those engaged in treatment through the correctional residential facility were more Ready to quit drinking, rated it as more Important, and were more Confident in their ability to quit than those from the community.

Table 19. Readiness, Importance, and Confidence to Quit Drinking Alcohol

| | Community (<i>n</i> = 60) | Residential (<i>n</i> =59) |
|--------------------|-------------------------------|--------------------------------|
| Readiness (M, SD) | 7.68 (2.87) | 9.59 (0.95) |
| Importance (M, SD) | 7.03 (2.93) | 9.73 (0.83) |
| Confidence (M, SD) | 8.11 (2.47) | 9.57 (0.79) |

Source: NRLC, 2014

Motivational Enhancement Therapy is specifically designed to elicit readiness to change, important factors in changing, building self-efficacy; but it is also designed to provide the motivation needed to begin a change plan once individuals express readiness, believe it is important and feel confident in their ability.

Stages of Change

Stages of change are an addiction model focusing on progression of through different stages on the way to recovery. These stages range from Pre-Contemplation (i.e., not recognizing a need for change their alcohol use) to Trying to Change (i.e., actively taking steps to stop alcohol misuse). In our assessment, we found those engaged in treatment through the correctional residential facility were further along in the change process than those in the community. In fact 37.3% of the community sample were not even ready to change their drinking behavior, despite having at least 1 DWI.

Table 20. Stages of change (Readiness Scale)

| | Community (n= 60) | Residential (n=59) |
|-------------------|----------------------|-----------------------|
| Pre-contemplation | 10.2% | 0% |
| Contemplation | 27.1% | 1.7% |
| Ready to Change | 13.6% | 16.9% |
| Trying to Change | 49.2% | 81.4% |

Source: NRLC, 2014

Given that over a 3rd of offenders reported that they were not ready for change and almost half reported that they were trying to change, we have designed our treatment to increase perception of alcohol use risks (pre-contemplators), tip decisional balance in favor of change (contemplators), reinforce commitment and motivation for change (ready to change), and provide skills and incentives for treatment adherence (trying to change) by using Motivational Enhancement Therapy, Cognitive Behavioral Therapy with a focus on coping skills, and Contingency Management

Motivational Enhancement Therapy is specifically designed to guide clients in the direction of change behavior

Cognitive Behavioral Therapy with a focus on coping skills is designed to provide strategies for quitting

Contingency Management provides incentives for treatment adherence (trying periods of continuous abstinence from alcohol use).

Expectancies from Drinking Alcohol

Offenders in the community and in the residential facility perceive relatively high distal and proximal negative consequences of using alcohol.

Table 21. Negative Alcohol Expectancy

| | Community (<i>n</i> = 60) M (SD) | Residential (<i>n</i> =59) M (SD) |
|-----------------------|---|--|
| Proximal Expectancies | 42.10 (17.28) | 48.45 (16.74) |
| Distal Expectancies | 76.52 (37.46) | 95.13 (40.50) |
| Total Score | 118.61 (52.80) | 143.60 (54.98) |

Source: NRLC, 2014

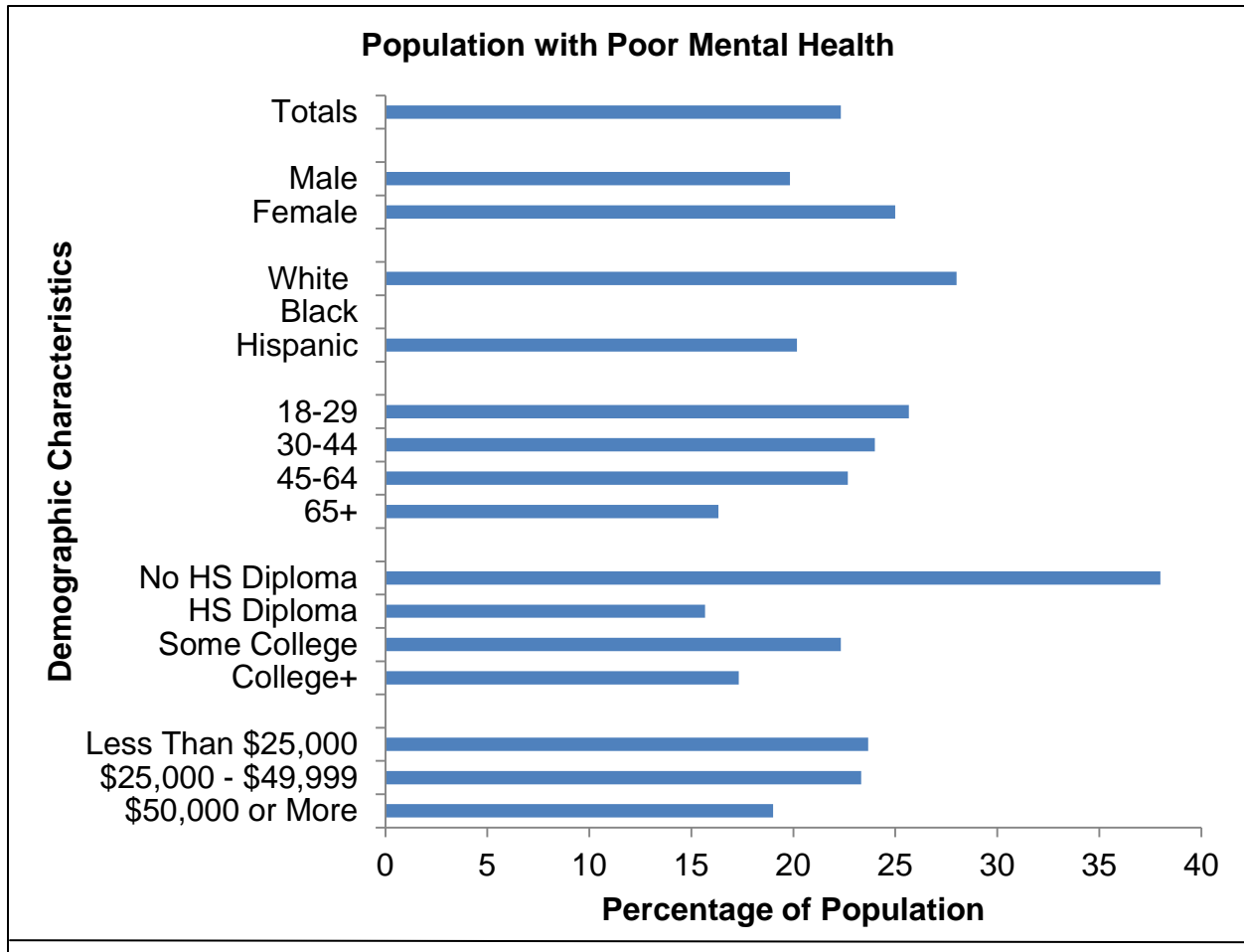
Motivational Enhancement Therapy is specifically designed to evoke concern over whether current patterns of problematic alcohol use is discrepant with an individual's values and how it may get in the way of goals, so to provide proximal meaning.

TREATMENT NEEDS (NON-SUBSTANCE USE)

Mental Health

Mental health problems are not uncommon. The latest data from Bexar County show that 23% of adults report experiencing at least 5 days of poor mental health function in the past year (Texas Department of State Health Services, BRFSS, 2012), which is slightly higher than reports for Texas (20%). Problems with mental health are disproportionately concentrated among adults with certain demographic characteristics (Figure 14). More women than men reported five or more days of poor mental health (25% vs. 20%, respectively) while Whites reported a higher percentage of five or more days of poor mental health compared to Hispanics (28% vs. 20%, respectively). Those age 65 or older (16%) were less likely to report poor mental health days than those younger. In comparison to the proportion of respondents who reported annual household incomes more than \$50,000 annually, a slightly higher proportion of those who reported household incomes than \$ 50,000 per year reported five or more days of poor mental health in the past month. Finally, over twice as many people with less than a high school education (38%) reported five or more days of poor mental health in the past month than those who were high school graduates (16%).

Figure 14. Poor self-reported mental health (>= 5 days), Bexar County, 2012



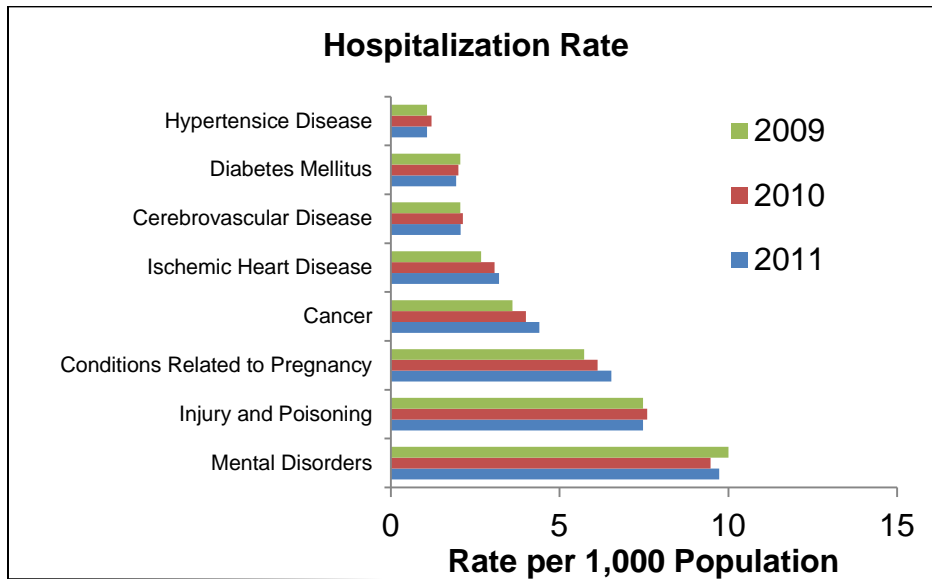
Note: no data for a subcategory indicates a sample size too small to report.

Source: Center for Health Statistics, 2012

Mental Health Disorders and Their Treatment

Relative to all other health conditions, mental disorders accounted for the highest proportion of hospitalizations in Bexar County (2009 to 2011: Figure 15): about 10 out of 1,000 people in 2011 were hospitalized for mental health care. Injury and poisoning accounted for the second highest number of hospitalizations (7 per 1,000 in 2011), followed by complications related to pregnancy (6 per 1,000 in 2011). Despite the high rate of mental health hospitalizations, the capacity to treat is far less than the demand for services.

Figure 15. Hospitalization rate (per 1,000 people), Bexar County, 2009-2011



Source: Center for Health Statistics, 2012

Mental Health Characteristics of the DWI Offender Sample

In addition to their substance use diagnoses (occurring in about 97% of cases), psychiatric comorbidity is common among in adults with DWIs. In our survey of mental health treatment among adults with DWIs, depression and anxiety were the most common disorders and the majority of the sample was not receiving treatment for their psychiatric condition (Table 22: NRLC, 2014).

Table 22. Prevalence of non-Substance Use Mental Health Diagnoses

| | Diagnosed % (n=119) | Not Currently Treated % (n=119) |
|-----------------------------|---------------------------|--|
| Any Mental Health Diagnosis | 26.1% | 61.3% |
| <i>Depression</i> | 20.2% | 54.2% |
| <i>Anxiety</i> | 14.7% | 64.7% |
| <i>PTSD</i> | 10.1% | 83.3% |
| <i>Bipolar</i> | 8.4% | 50.0% |
| <i>Schizophrenia</i> | 1.7% | 50.0% |

Source: NRLC, 2014

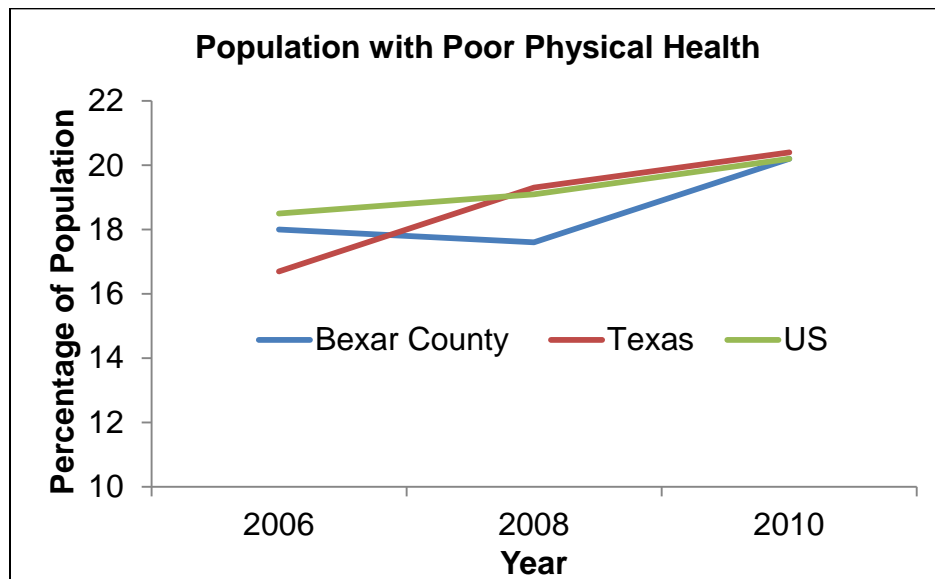
Our survey shows that along with substance use diagnoses psychiatric comorbidity is common among adults with DWI offences, yet the majority were not currently receiving treatment.

Screening for psychiatric disorders will be included in our initial assessment procedure to identify individuals who may need to be referred for diagnoses and additional treatment.

Physical Health

A substantial portion of our community reports that they experience periods of poor physical health and these rates are similar for the county, Texas, and the US (Figure 16). The most recent data (2012) are that slightly more Bexar County adults (23%) than Texas adults (20%) reported that they experienced five or more days of poor physical health in the past 30 days.

Figure 16. Population with poor self-reported physical health (>= 5 days in past 30 days) (%), U.S., Texas, and Bexar County, 2006-2012



Source: Bexar County Health Status Report, 2012
Bexar County Health Status Report (2012)

Physical Health Characteristics of the DWI Offender Sample

Not only are adults with DWI offences in need of substance abuse treatment and possibly additional psychiatric treatment but they may also have treatment needs within the context of poor overall health (potentially the result of alcohol misuse). In our sample of low income adults with DWI, over 35% reported chronic medical conditions: most commonly high blood pressure (NRLC, 2014). On average about 40% of cases where not currently receiving health care services for their medical condition(s).

Table 23: Diagnoses and Treatment for Health Problems

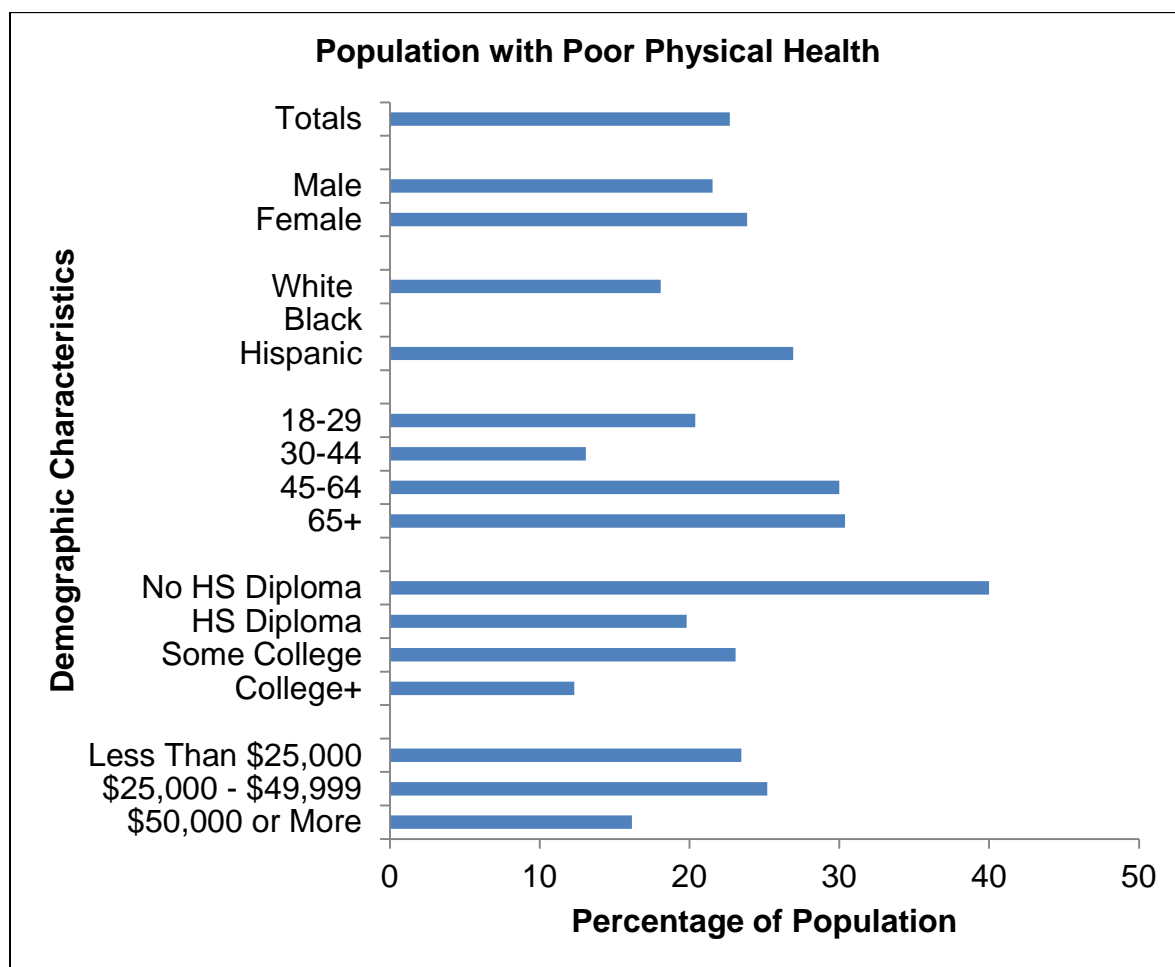
| | Diagnosed % (n=119) | Not Treated % (n=119) |
|--|---------------------------|-----------------------------|
| Any Health or Medical Problem | 36.1% | 39.5% |
| Alcohol Related Health or Medical Problems | | |
| <i>High Blood Pressure</i> | 13.4% | 43.8% |
| <i>High Cholesterol</i> | 5.9% | 42.9% |
| <i>Diabetes</i> | 5.0% | 16.7% |
| <i>Liver Problems</i> | 3.4% | 75.0% |

Source: NRLC, 2014

Demographic Characteristics and Poor Physical Health

Poor physical health is not equally distributed across our community; it is concentrated among individuals with certain demographic characteristics (see Figure 17). Slightly more women in Bexar County than men reported five or more days of poor physical health (24% vs. 22%, respectively), while Hispanics reported a higher percentage of five or more days of poor physical health compared to Whites (27% vs. 18%, respectively). Those over the age of 45 were far more likely to report poor health days than those younger. Across annual household income levels, more respondents with household incomes below \$25,000 reported poor health days than respondents with household incomes above \$50,000 (29% vs. 16%, respectively). Finally, 40% of those with less than a high school education reported five or more days of poor physical health, a rate substantially higher than those with a college education (13%).

Figure 17. Population with poor self-reported physical health (>= 5 days) (%), by demographics, Bexar County, 2012



Note: no data for a subcategory indicates a sample size too small to report

Source: Center for Health Statistics, 2012

Alcohol misuse can greatly increase the risk of serious physical health problems, considering the high prevalence of alcohol use disorders among adults with DWI, physical health treatment needs also need to be considered.

Screening, Brief Intervention and Referral to Treatment (SBIRT) identifies and evokes concern for health outcomes which individuals may be at risk for.

HEALTHCARE USAGE

In our survey of low income adults with DWI in Bexar County (NRLC, 2014), we found that their health coverage and health service provider access was inadequate. The majority of our sample is uninsured, have no primary care physician to manage their health care, and primarily rely on the emergency department for their health care services (see Table 24). These rates are much higher in the DWI population we sampled relative to the general community: while nearly 74% of the DWI sample have no regular health care provider, for Bexar County as whole the rate is 31.2% (Bexar County Health Status Report, 2012)

As a result, low income adults with DWI's are not adequately managing their health condition: less than 15% had received mental health service in the past year despite the fact that nearly 97% of the sample had an alcohol use disorder and 26.1% had a psychiatric disorder in addition to their substance use disorder. Similarly, less than 12% of the sample had received general health care even though 36.1% had a chronic medical condition (not including substance abuse treatment).

Table 24. Health Care Characteristics

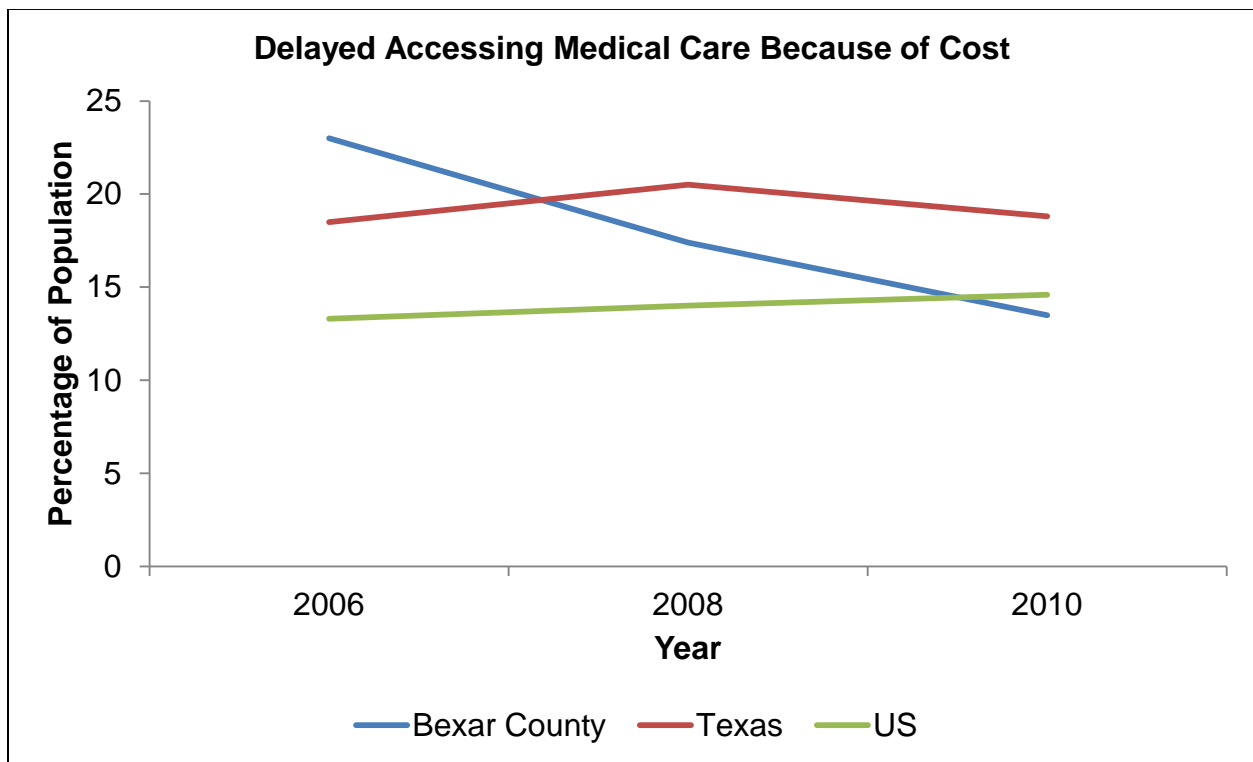
| Health Care Characteristic | Total (n=119) |
|---|------------------|
| No Current Primary Care Physician | 73.9% |
| Most Likely source of health care | |
| <i>Emergency Room</i> | 41.07% |
| <i>Primary Care Physician</i> | 30.36% |
| <i>Urgent Care Facilities</i> | 9.82% |
| <i>Community Health Clinic</i> | 7.14% |
| <i>Other</i> | 4.46% |
| Mental Health Treatment in the Previous Year | 13.1% |
| General Health Treatment in the Previous Year | 11.5% |

Source: NRLC, 2014

Cost as a Barrier to Health Care

Not surprisingly cost is a major barrier to seeking health care services. Figure 18 shows rates of adults reporting that they had chosen to delay accessing health services due to cost. This information is reported for Bexar County, Texas, and the US. While Bexar County had much higher rates than Texas or the nation in 2006, the county rate had been declining through 2010. However, this trend reversed in 2012 in which 19% of Bexar County respondents reported that they had delayed seeking medical care because of cost in the past year.

Figure 18. Population delayed medical care because of cost (%), U.S., Texas, and Bexar County, 2006-2012



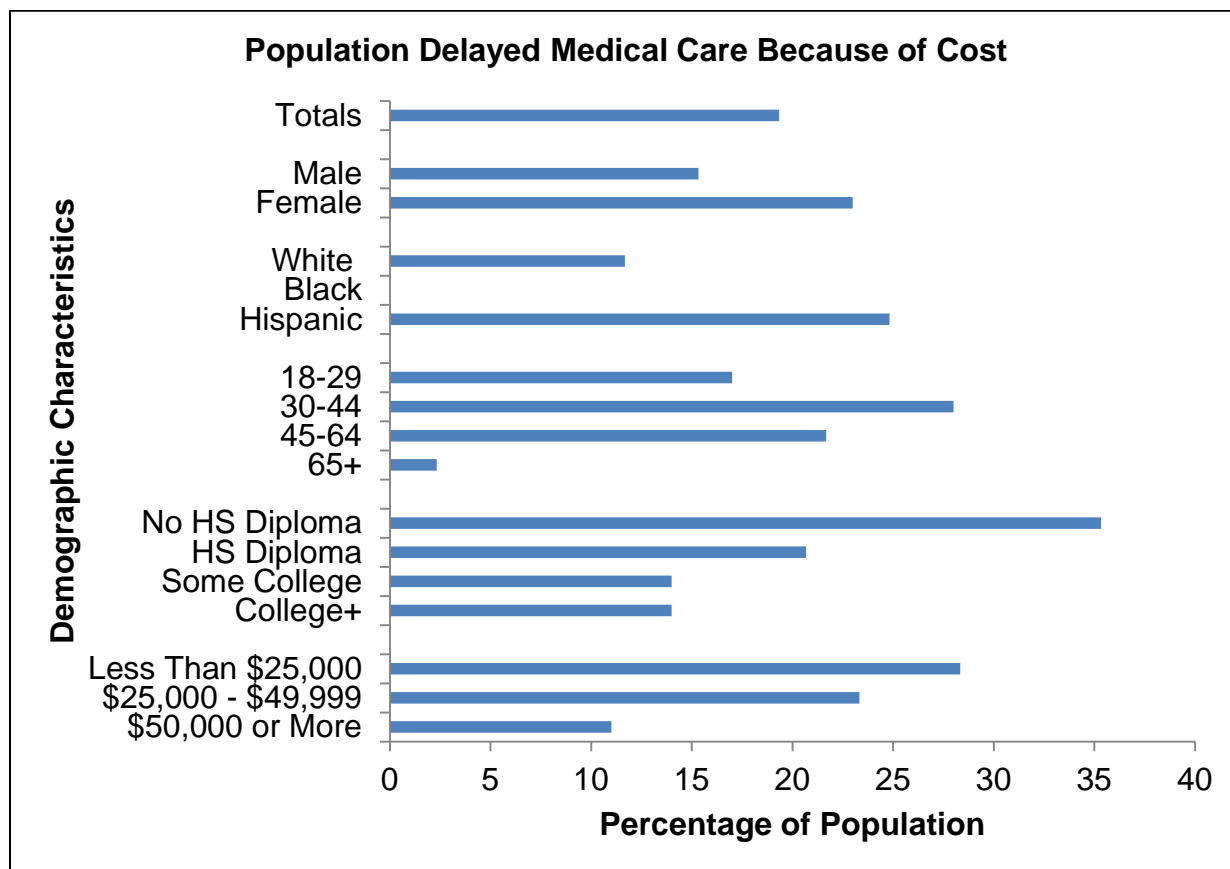
Note: 2008/2010 data is not comparable to 2012 data due to changes in methodology and weighting Note: 2012 data for the US is not publicly available

Source: Center for Health Statistics, 2012

Cost as a Barrier to Health Care: Demographic Characteristics

The cost of care affected demographics groups very differently. In 2012, Bexar County residents with less than a high school education and those with annual household incomes less than \$25,000 were most likely to have delayed medical care in the past year due to cost (Figure 19). Over twice as many respondents whose household made less than \$25,000 (29%) a year than those who made more than \$50,000 (11%) delayed medical care due to cost. Over one third of those with less than a high school education reported that they delayed medical care due to cost compared to about 14% for college graduates. Among racial/ethnic groups, Hispanics were more than twice as likely (25%) as Whites (12%) to delay seeking medical care. Finally, women in Bexar County were more likely (23%) than men (16%) to delay medical care due to cost. For this reason we will take special efforts in the implementation of our treatment to provide services to the most at risk group: Hispanic adults with low income and low education.

Figure 19. Population delayed medical care because of cost (%), by demographics, Bexar County, 2012



Note: No data for a subcategory denotes a sample size that was too small

Source: Center for Health Statistics, 2012

TREATMENT RESOURCES, CAPACITIES AND GAPS

Federally Qualified Health Centers

Bexar County has fewer health service providers for the underserved, than the state of Texas as a whole or the national average. The ratio of Federally Qualified Health Centers per 100,000 Population for Bexar County is only 1.17 compared to 1.73 for the USA average. Federally qualified health centers (FQHCs) include all organizations receiving grants under Section 330 of the Public Health Service Act (PHS). FQHCs qualify for enhanced reimbursement from Medicare and Medicaid, as well as other benefits. FQHCs must serve an underserved area or population, offer a sliding fee scale, provide comprehensive services, have an ongoing quality assurance program, and have a governing board of directors. There are 20 Federally Qualified Health Centers in Bexar County to serve over 1.7M residents, compared to 2 in Comal County (population 108K); 0 in Guadalupe (population 132K); and 1 in Wilson (population 43K). Table 25 shows the number and rate of FQHCs per 100K residents.

Table 25. Number and rate of Federally Qualified Health Centers 2012: Comparison of Bexar County, State of Texas, United States

| | Total Population | Number of Federally Qualified Health Centers | Federally Qualified Health Centers per 100,000 Population |
|---------------|------------------|--|---|
| Bexar County | 1,714,773 | 20 | 1.17 |
| Texas | 25,145,561 | 307 | 1.22 |
| United States | 312,471,327 | 5,402 | 1.73 |

Source: United States Department of Health & Human Services, 2012

THE TREATMENT

Considering the complexity of the treatment needs of DWI offenders demonstrated by this needs assessment, the solution requires a combination of early intervention and treatment approaches.

Screening, Brief Intervention, Referral to Treatment (SBIRT)

SBIRT is an evidence-based approach that:

- Quickly assesses the severity of substance use and identify the appropriate level of treatment.
- Provides a brief intervention to facilitate insight and awareness regarding the individual's own substance use behaviors and their motivation toward behavioral change.
- Initiates a referral to the appropriate level of treatment for those identified as needing more extensive treatment.

SBIRT is best utilized for this population because:

- It is brief (e.g., typically about 5-10 minutes for brief interventions; about 5 to 12 sessions for brief treatments).
- The screening is universal.
- One or more specific behaviors related to risky alcohol use are targeted.
- It is comprehensive.
- There is strong research or experiential evidence supports the model's effectiveness.

Motivational Enhancement Therapy

Considerable research and clinical attention have focused on ways to better motivate substance users to consider, initiate, and continue substance abuse treatment, as well as to stop or reduce their excessive use of alcohol and other substances, either on their own or with the help of a formal program. A related focus has been on sustaining change and avoiding a recurrence of problem behavior following treatment. Coupling a new therapeutic style--motivational interviewing--with a transtheoretical stages-of-change model offers a fresh perspective on what clinical strategies may be effective at various points in the recovery process. Motivational interventions strive to meet the client "where they are" in terms of behavior change and to facilitate movement through identified stages. Motivational interviewing is an effective clinical tool that can be incorporated into all phases of substance abuse treatment as well as many other social and health services settings.

Behavioral and Cognitive Behavioral Therapies

Contingency management and Cognitive Behavioral therapies are the 'gold standard' of evidence-based interventions. These interventions teach strategies and skills to essentially counter condition substance using behaviors and to replace using behaviors with pro-social non-using activities. Contingency management reinforces positive treatment gains establish a schedule of reinforcing contingencies that are within the control of the individual for treatment adherence, reduced substance use and abstinence.

REFERENCES

- Bexar County District Attorney's Office. (2014). Open Records Request.
- Bexar County Health Status Report (2012). San Antonio Metropolitan Health District surveys 2012. Link:
<http://www.dshs.state.tx.us/Layouts/ContentPage.aspx?pageid=35475>
- Bexar County Sherriff's Office. (2013). Open Records Request.
- Center on Budget and Policy Priorities. (2012). The Texas Economic Model: Hard for Other States to Follow and Not All It Seems. Retrieved from
<http://www.cbpp.org/cms/index.cfm?fa=view&id=3739>
- Centers for Disease Control and Prevention. (2011). Selected Metropolitan/Micropolitan Area Risk Trends: Bexar County, TX. Retrieved from <http://apps.nccd.cdc.gov/brfss-smart/MMSACTyRiskChart.asp?MMSA=142&yr2=2011&qkey=8381&CtyCode=10423&cat=AC#AC>
- Centers for Disease Control and Prevention. (2013). Local Health Risk Prevalence Data. Retrieved from <http://apps.nccd.cdc.gov/BRFSS-SMART/SeIMMSAPrevData.asp>
- Center for Health Statistics. (2012). Texas Behavioral Risk Factor Surveillance System (BRFSS). Texas Department of State Health Services. Retrieved from
<https://www.dshs.state.tx.us/chs/brfss/>
- Cheung, R. (2006). Chronic Hepatitis C in the Hispanic Population. The HCV Advocate. Retrieved from http://www.hcvadvocate.org/hcsp/hcsp_pdf/hispanics.pdf
- City of San Antonio. (2013). San Antonio & Bexar County Health & Demographic Statistic. Retrieved from <http://www.sanantonio.gov/health/Healthprofiles-Main.html>
- Fish, C. (2012). UTSA Today. Retrieved from
<http://utsa.edu/today/2012/05/shalestudy.html>
- Health Collaborative. (2013). 2013 Bexar County Community Health Assessment Reported. Retrieved from
http://www.christussantarosa.org/workfiles/BCCHA_GeneralReportFinal.pdf
- Liu, L. Y. (2005). 2005 Texas Survey of Substance Use Among College Students. Texas Department of State Health Services. Retrieved from
www.dshs.state.tx.us/sa/Research/college/2005/2005_CollegeSurvey_lIU043007.pdf
- Medindia Network for Health. (2010). Liver Disease-12th Most Common Cause of Deaths in US: Study. Retrieved from <http://www.medindia.net/news/Liver-Disease-12th-Most-Common-Cause-Of-Deaths-in-US-Study-76136-1.htm>
- National Highway Traffic Safety Administration. (2013). Traffic Safety Facts: 2012 Motor Vehicle Crashes Overview. Retrieved from <http://www-nrd.nhtsa.dot.gov/Pubs/811856.pdf>
- NRLC (2014). Neurobehavioral Research Laboratory and Clinic interview of adults convicted of at least 1 driving while intoxicated event.
- Office of National Drug Control Policy. (n.d.). A 21st Century Drug Policy. Retrieved from http://www.whitehousedrugpolicy.gov/publications/economic_costs/estimate.pdf
- Presely, C. A., Meilman, P. W., & Leichter, J. S. (2005). College Factors That Influence Drinking. College Drinking - Changing the Culture. Retrieved from
<http://www.collegedrinkingprevention.gov/supportingresearch/journal/presley.aspx>
- San Antonio Council on Alcohol and Drug Abuse . (2011). Circles of San Antonio Coalition Needs Assessment June 2011. Retrieved from
http://nowdata.cinow.info/media/uploads/2012/02/10/Circles_of_SA_Needs_Assessment_June_2011.pdf

San Antonio Metropolitan Health. (2009). Health Profiles 2008. Retrieved from <http://www.sanantonio.gov/Portals/0/Files/health/News/HealthProfiles-2008.pdf>

San Antonio Police Department. (2013). Open Records Request.

Substance Abuse and Mental Health Services Administration. (2014). Behavioral Health Services Information System. Retrieved from <http://www.samhsa.gov/data/DASIS.aspx>

Texas Department of Criminal Justice. (2014). Open Records Request.

Texas Department of State Health Services (2009-2011). via San Antonio Metropolitan Health District, additional analyses conducted by HRiA.

Texas Department of State Health Services. (2012). Open Records Request.

Texas Department of State Health Services. (2013a). Clinical Management for Behavioral Health Services. Retrieved from <http://www.dshs.state.tx.us/cmbhs/>

Texas Department of State Health Services. (2013b). Fourth Quarter - FY 2013. Behavioral Health Databook. Retrieved from <http://www.dshs.state.tx.us/mhsa/databook/>

Texas Department of State Health Services. (2014). Texas Population, 2010 (Historical Race Ethnicity Categories). Retrieved from <http://www.dshs.state.tx.us/chs/popdat/Texas-Population,-2010/>

Texas Department of State Health Services. (2014). Texas Population, 2015 (Projections). Retrieved from <http://www.dshs.state.tx.us/chs/popdat/ST2015.shtm>

Texas Department of Transportation. (2014). Open Records Request.

Texas Health and Human Services Commission. (2012). Tools and Guidelines for Regional Healthcare Partnership Participants. Retrieved from <http://www.hhsc.state.tx.us/1115-Waiver-Guideline.shtml>

Texas State Data Center. (2006). Estimate of the Number and Percent Uninsured by Age and Race/Ethnicity for Texas Health Regions, 2005. Retrieved from http://txsdc.utsa.edu/Reports/2006/CountyEstimatesUninsured/uninsured_estimates_all_2005.pdf

Texas Workforce Commission. (2013). Texas Labor Market Review. (V. Downey, Ed.) A Monthly Newsletter of the Texas Workforce Commission, pp. 1-16.

The State Of Texas County of Bexar County. (2014). Referral Trends 2004-2010. Bexar County Juvenile Probation Department. Retrieved from http://gov.bexar.org/jpd/Docs/JPD_Trend_Report.pdf

United States Census Bureau. (2012). American Community Survey: 2007-2011 5-year and 3-year estimates. Retrieved from http://www.census.gov/acs/www/data_documentation/2011_release/

United States Census Bureau. (2013). American Community Survey: 2008-2012 5-year estimates and 2012 1-year files. Retrieved from http://www.census.gov/acs/www/data_documentation/2012_release/

United States Census Bureau. (2014). State and County QuickFacts. Retrieved from <http://quickfacts.census.gov/qfd/states/48/4865000.html>

United States Department of Commerce. (2014). 2007-2011 American Community Survey 5-Year Estimate. United States Census Bureau. Retrieved from http://www.census.gov/newsroom/releases/archives/news_conferences/20121203_a_cs5yr.html

United States Department of Commerce. (2014). State & County QuickFacts. United States Census Bureau. Retrieved from <http://quickfacts.census.gov/qfd/states/48000.html>

United States Department of Health and Human Services (2012). Health Provider Shortage Area by State and County: Bexar County, Texas. Retrieved from <http://hpsafind.hrsa.gov/HPSASearch.aspx>

United States Department of Health and Human Services (2013). Health Resources and Services Administration, Health Professional Shortage Areas.

Zip Atlas. Percentage of Population Below Poverty Level in San Antonio, TX by Zip Code. (2014). Retrieved from <http://zipatlas.com/us/tx/san-antonio/zip-code-comparison/population-below-poverty-level.htm>