

Wisconsin

Mental Health and Substance Abuse

Needs Assessment



STATE OF WISCONSIN
DEPARTMENT OF HEALTH SERVICES
Division of Mental Health and Substance Abuse Services
P-00613 (02/2014)

Introduction

Two Federal block grants bring some \$7 million in mental health and \$28 million in substance abuse services funds to Wisconsin each year. Federal guidance for the Federal Fiscal Year (FFY) 2014-2015 Community Mental Health Services and Substance Abuse Prevention and Treatment Block Grant application required states to complete a data-driven behavioral health assessment and plan, hereafter referred to as the needs assessment. The intent of the needs assessment is to: (1) assess the strengths and needs of the service system's response to specific populations; (2) identify the unmet service needs and gaps within the service system; and (3) develop priorities, objectives and strategies to address the identified needs and gaps.

Through the block grants, the Federal government desires to achieve "good and modern" state mental health and substance abuse service systems. A good and modern system is accountable and organized; controls costs; improves quality; is accessible, equitable, and effective; prevents conditions; reduces cultural disparities; promotes individualized service plans; empowers and involves consumers; uses available technology; encourages natural support systems; and establishes links with health care. Many of these attributes can be analyzed by this needs assessment. While the future of many healthcare reforms passed in the Federal Patient Protection and Affordable Care Act are still uncertain in Wisconsin, Federal guidance requests that the needs assessment address issues related to the changing healthcare environment and the impact on uninsured persons.

Needs Assessment Approach

For the purposes of the behavioral health assessment and plan, needs assessment will be defined as a "data-driven and systematic exploration and determination of the gaps between current conditions and desired conditions." The goal of the needs assessment is to develop a set of state-specific, data-driven and realistic priorities, objectives and strategies to address identified needs and gaps. The objectives selected must have measurable performance indicators associated with them, and the measures must be tracked. Selected indicators from four broad categories of data and information will be collected and analyzed as part of this needs assessment. The indicators were selected based upon data availability and having been previously identified as a priority problem or need through Wisconsin surveys, studies or stakeholder or public input.

I. Population(s) Affected. This refers to the prevalence of disorders, conditions and associated problems for the entire population as well as for special populations such as the homeless, females, cultural groups, youth, older adults, veterans, rural populations and criminal justice offenders. This analysis will answer the questions: What are the problems? What is the extent of the problem(s)? What is the need for services, strategies, supports or treatment across different populations?

II. Access to Services, Strategies, Supports and Treatment. This analysis will answer the questions: Are populations able to gain entry to services, supports or treatment? Are prevention strategies in place in communities? Do people receive preventative, treatment or support services when (timeliness) and where (geographically available) they need it? What are the barriers to receiving services and strategies? What proportion of the population are recipients of services, strategies, supports and treatment (treated prevalence or penetration rate)?

III. Availability and Capacity of Services and Strategies. What types of services and strategies are needed and what is the capacity of the system (including number of providers and workforce characteristics) to meet the needs? What is the capacity of the system to provide a culturally and linguistically appropriate mix of services to meet the needs of the populations affected? Are the resources in the system appropriately aligned and cost effective (i.e., relative use of more intensive inpatient care compared to other community-based care)?

IV. The Quality, Outcomes and Impact (Effectiveness) of Services, Strategies, Supports or Treatment. Do people receive “appropriate” preventative, treatment or supportive services? Are the services, strategies, supports or treatment of desired quality? Are the services or strategies safe, client centered, efficient, equitable, evidence based, effective or otherwise proven to work? What happened to the consumer and/or the system as a result of the interventions, strategies, services or supports? What is the impact? What is and is not achieved to ameliorate the condition, disorder or problem? Outcomes to be measured will also include what consumers believe are important to them as well as those outcomes important for the overall system.

A combined mental health and substance abuse formal needs assessment committee consisting of members from the Governor-appointed Wisconsin Council on Mental Health and the State Council on Alcohol and Other Drug Abuse was established to provide guidance and direction about issues to examine, review the analyzed data, provide a preliminary ranking of priorities and assist with developing strategies and performance indicators. A tool based on a public health program priority rating model¹ (Appendix A) was developed to rate and rank the gaps, issues and problems identified through the Wisconsin needs assessment.

Public and stakeholder input was sought through a brief three-question survey asking about mental health and substance abuse needs, service gaps, problems and issues. Consumers, advocacy groups, service providers, Tribal agencies, veterans and county intermediary agencies submitted completed surveys (N = 72). These data are included in the analysis where appropriate, and a summary is located in Appendix B.

The assembled data and information in this report come from a variety of primary and secondary data sources, including the United States Census Bureau, the National Survey on Drug Use and Health, the Centers for Disease Control and Prevention’s (CDC) Behavioral Risk Factor Surveillance System, CDC’s Youth Risk Behavior Surveillance System, Wisconsin Mental Health Statistics Improvement Program (MHSIP) survey, Wisconsin County Public Treatment Form, Wisconsin Human Services Reporting System, Wisconsin Medicaid Claims database, Wisconsin Crime Information Bureau, Wisconsin Public Health Profiles, Wisconsin Mortality Records database, Wisconsin Traffic Crash database and others. These sources are footnoted in the respective report and reference sections.

I. Prevalence

The purpose of this report section is to provide an estimate of the overall prevalence of mental illness and substance abuse and the prevalence or occurrence of selected conditions and consequences, analyze trends, make comparisons with national data where available, and identify disparities among selected target populations. The result will be recommendations regarding needs, gaps and disparities that can later be rated and ranked along with needs, gaps and disparities identified here and elsewhere in this report. This is a logical first step for a needs assessment, that is, describing how many individuals have a mental health or substance abuse need. Measuring the prevalence of needs will help indicate the size of the need and the type of needs that Wisconsin is seeking to address.

Mental Health Prevalence

When mental health professionals assess an individual's mental health condition, it may take several hours of an interview that stretches over a couple of appointments depending on the severity of the individual's condition. Such a process is not possible, of course, when measuring the prevalence of mental health conditions in the entire population. Short phone surveys or personal interviews of a sample are typically used to estimate the mental health condition of the population.

Up to three concepts are typically used in short population mental health measures: clinical symptoms, functional impairment, and duration of the disorder. The National Survey on Drug Use and Health (NSDUH)² and the National Comorbidity Study (NCS)³ are the two major surveys that use this approach to calculate national prevalence estimates of mental health. The frequency of symptoms, such as depression, anxiety, stress, and hopelessness, is measured. A second set of questions addresses whether the individual believes their symptoms restrict their daily functioning in their job, family, social networks, etc. If both symptoms and functional impairment exist, the individual is estimated to have a "serious mental illness (SMI)." The term for children in this category is severe emotional disorder (SED). Individuals with a mild mental health condition will experience symptoms but still be able to function in their daily life for the most part. Together, these two groups are sometimes called individuals with "any mental illness (AMI)."

The prevalence of mental illness is stated as the percentage of the population who have an SMI or AMI in the past year. While estimates of the prevalence of specific mental health conditions like depression, schizophrenia, and bipolar disorder have been calculated through the use of a more intensive interview process, the SMI/AMI measures are useful for assessing overall prevalence. See Appendix C for more details on the measurement of mental illness in Wisconsin and nationally.

While the prevalence of substance abuse is measured with a fairly standard method regardless of the source, the measurement of mental health prevalence varies depending on the source. Similar to the distinction between AMI and SMI, some measures focus on symptoms only and leave out functional impairment and/or duration of the disorder. In addition, the time frame of assessment varies from one month to one year. Survey question design and survey methodology also vary.

Thus, when selecting a mental health prevalence measure, the purpose of the project and how the prevalence estimate will be used should be considered. Since SMI/SED are common concepts that providers use to assess the level of a consumer's needs and consumers with an SMI/SED are heavily represented in the public mental health system, a mental health prevalence measure that includes SMI/SED was chosen.

Given these criteria, the Substance Abuse and Mental Health Services Administration's (SAMHSA) NSDUH is the most current source of adult mental health prevalence data for both AMI and SMI at both the national and state level. The most recent estimates from the NSDUH (2010-11)² indicate an overall national prevalence of AMI at 19.8% and of SMI at 5.0% for adults 18 and older. Wisconsin's specific overall adult rates of AMI and SMI respectively are slightly lower at 19.0% and 4.6%.

Prevalence Rates of Mental Illness in Wisconsin

	Any Mental Illness (AMI)	Serious Mental Illness (SMI/SED)
ADULTS (National) ^a	19.8%	5.0%
ADULTS (Wisconsin) ^a	19.0%	4.6%
CHILDREN (National) ^b	21.0%	11.0%
CHILDREN (Wisconsin)	Not available	Not available

^a National Survey on Drug Use and Health, 2010-2011.

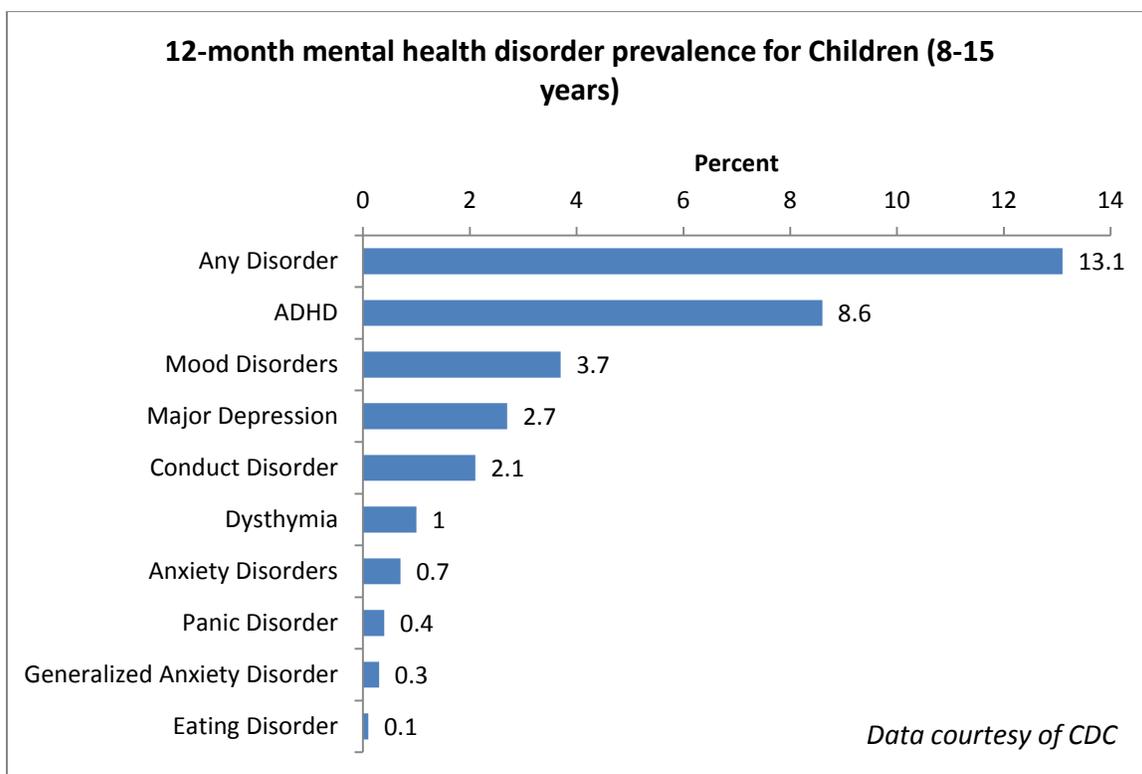
^b MECA study.

The NSDUH focuses primarily on adults, so estimates of serious emotional disorders (SED) in children are not available. The MECA Study (Methodology for Epidemiology of Mental Disorders in Children and Adolescents) has frequently been cited for its estimates of the prevalence of children’s mental health disorders, including in the U.S. Surgeon General’s Report in 2000. MECA Study estimates indicate 21.0% of children experience some form of mental illness within a year and 11.0% experience an SED⁴.

Every year, the Wisconsin State Division of Mental Health and Substance Abuse Services (DMHSAS) submits an application for its Mental Health Block Grant to SAMHSA. To assist states in assessing their needs, SAMHSA provides prevalence estimates of SMI and SED. SAMHSA’s 2011 population estimate of SMI for adults 18 and older is 5.4%⁵ and for children is 11.0%⁶. These rates are very similar to the SMI/SED rates from other studies cited above.

Prevalence of Individual Mental Health Disorders

The 2001-2004 National Health and Nutrition Survey (NHANES) conducted by the Centers for Disease Control and Prevention (CDC) provides national estimates of the prevalence of many specific childhood mental health disorders. The most common disorder among 8-15 year olds is attention-deficit/hyperactivity disorder (ADHD), which affects 8.5% of this age group⁷. This is followed by mood disorders at 3.7% and major depressive disorder at 2.7%.



The National Comorbidity Survey Replication (NCS-R) generates national estimates of the prevalence of specific disorders within a year for adults, as displayed in the table below. The category of anxiety disorders is most prevalent among adults at 19%, and different types of phobias are the most prevalent, specifically anxiety disorders occurring in 7-9% of adults⁸. Another way to examine disorders is by severity, as illustrated by the rates of serious, moderate and mild severity in the table below. People with the most serious form of disorders have a greater need for services and usually require more resources to recover. Although phobias are the most prevalent type of anxiety disorder, the percentage of adults who experience them with “serious severity” is the

lowest among the anxiety disorders. By contrast, adult separation anxiety disorder is experienced by just 1.9% of adults in a year, but over 50% experience it with “serious severity.” Impulse disorders are experienced by 10.5% of adults. While ADHD and intermittent explosive disorder are the most prevalent in this category, oppositional defiant disorder is experienced in its most severe form at almost twice the rate (60.7%) of other impulse disorders. Mood disorders affect 9.7% of adults annually, with depression being the most common form.

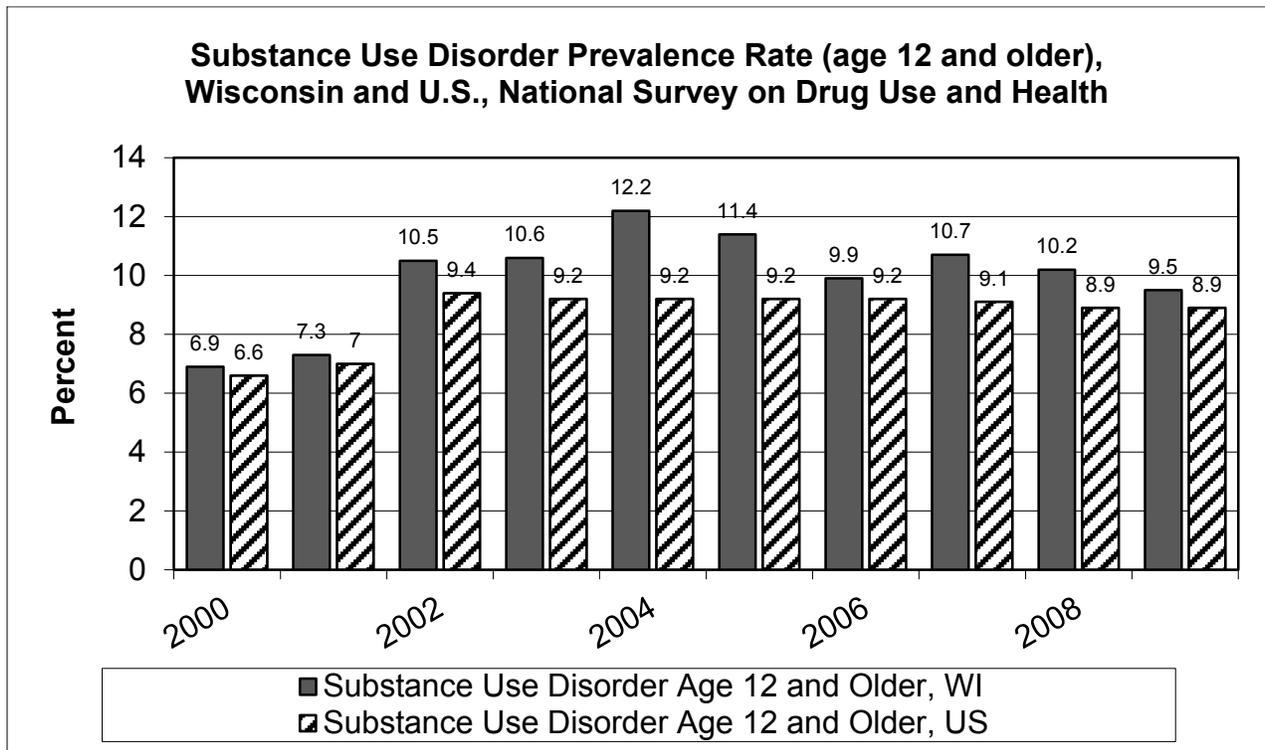
Percentage of Adults with a Behavioral Health Disorder, by Severity (2001-2002)

Disorder by disorder group	12-month prevalence (percent)	Serious severity (percent)	Moderate severity (percent)	Mild severity (percent)
Anxiety disorder				
Panic disorder	2.7	42.6	36.7	20.7
Generalized anxiety disorder	2.7	35.7	46.5	17.7
Social phobia	7.7	37.7	44.5	17.7
Specific phobia	9.1	24.2	38.6	37.2
Agoraphobia without panic	0.9	42.9	36.4	20.7
Posttraumatic stress disorder	3.6	42.7	32.7	24.7
Adult separation anxiety disorder	1.9	51.7	31.6	16.6
Any anxiety disorder	19.0	27.3	40.0	32.6
Mood Disorder				
Dysthymia	1.5	55.5	36.0	8.4
Major depressive disorder	6.8	41.5	47.5	11.0
Bipolar disorder	2.8	56.6	38.9	4.5
Any mood disorder	9.7	46.0	44.4	9.6
Impulse disorder				
Oppositional defiant disorder	1.0	60.7	20.0	19.3
Conduct disorder	1.0	34.7	20.1	45.2
Attention deficit hyperactivity disorder	4.1	37.8	26.5	35.8
Intermittent explosive disorder	4.1	32.9	44.6	22.5
Any impulse control disorder	10.5	32.9	36.8	30.3
Substance disorder				
Alcohol Abuse	3.1	50.6	16.7	32.7
Alcohol dependence	1.3	98.3	1.7	0.0
Drug abuse	1.3	47.6	18.0	34.5
Drug dependence	0.4	100.0	0.0	0.0
Any substance use disorder	3.8	47.9	18.8	33.3
Any disorder				
Any	26.9	25.5	39.7	34.7
1 disorder	14.2	8.0	38.8	53.2
2 disorders	6.2	26.9	48.5	24.5
3+ disorders	6.6	61.6	33.4	5.0

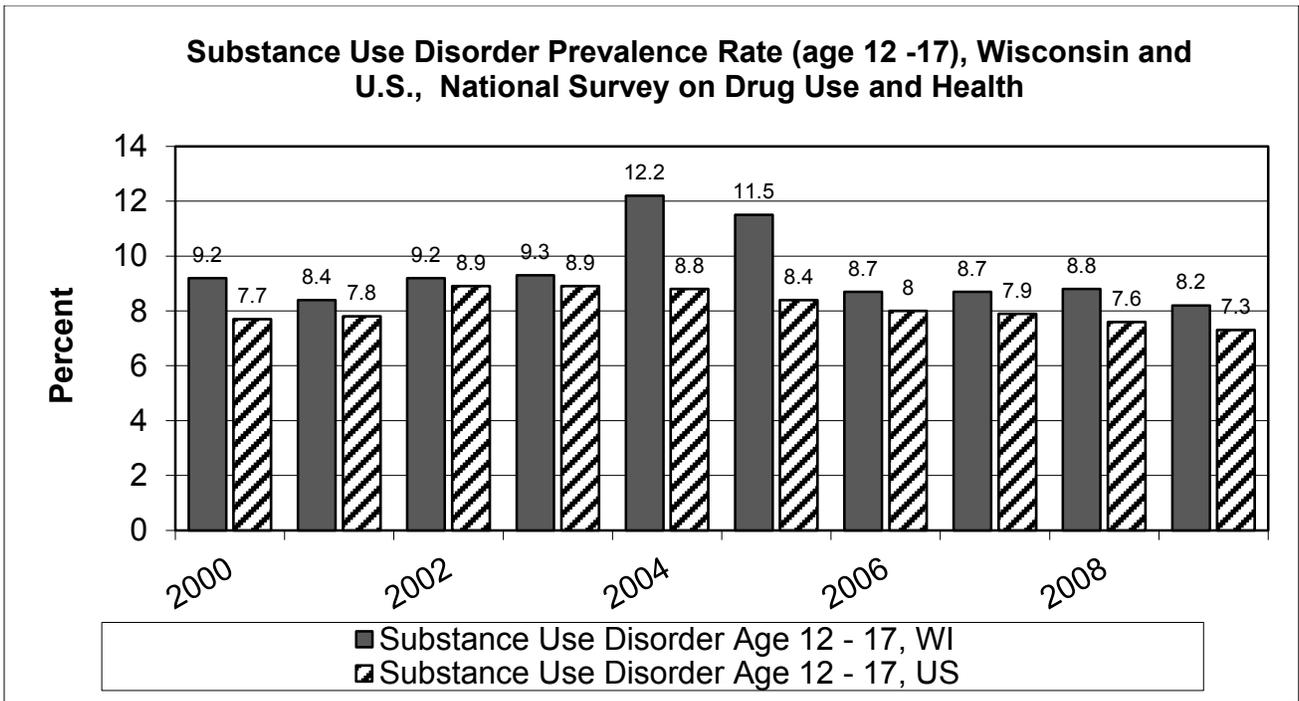
Source: National estimates from the 2001-2002 National Comorbidity Survey.

Substance Abuse Prevalence

The 2009-2010 National Survey on Drug Use and Health estimates there are 448,000 (9.5%) persons age 12 and older with a substance use disorder in Wisconsin.⁹ A person having a substance use disorder means that he/she meets the screening criteria of a negative pattern of alcohol or other mood-altering drug use, resulting in significant health, social, psychological or vocational impairment or distress and where intervention or treatment is warranted. The chart that follows displays 10 years of survey data on the overall rate of persons having a substance use disorder in Wisconsin in comparison with the national average. Since 2004, both the Wisconsin and national rates have been declining; however, Wisconsin exceeds the national rate by half a percentage point. This difference translates to about 28,290 additional Wisconsin persons having a substance use disorder compared to the national rate. Trends in the following graph can be misleading due to the calculation confidence intervals for surveys taken from a sample of the population. Confidence intervals give an estimated reliability range above and below the reported statistic (about 3%). For example, a statistic of 7% should be interpreted as being between 4% and 10%.



The next chart portrays the rate of Wisconsin and national substance use disorders among youth age 12 to 17. These rates are also declining since 2004, however, the Wisconsin youth substance abuse prevalence rate is above the national rate adding 3,950 Wisconsin youth substance abusers over the national rate.

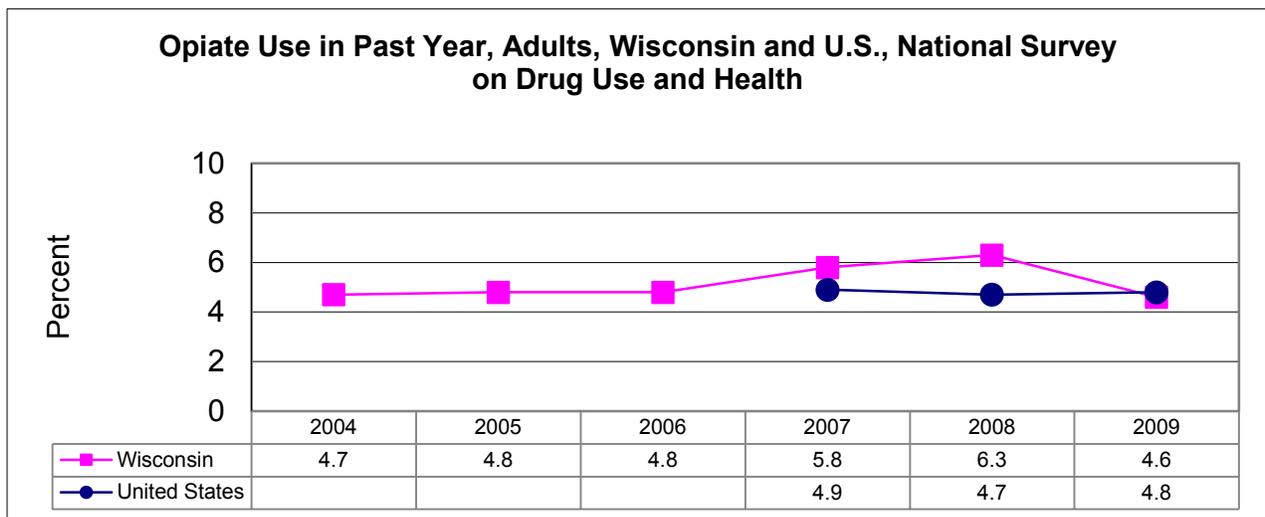


Prevalence of Individual Substance Use Disorders and Issues

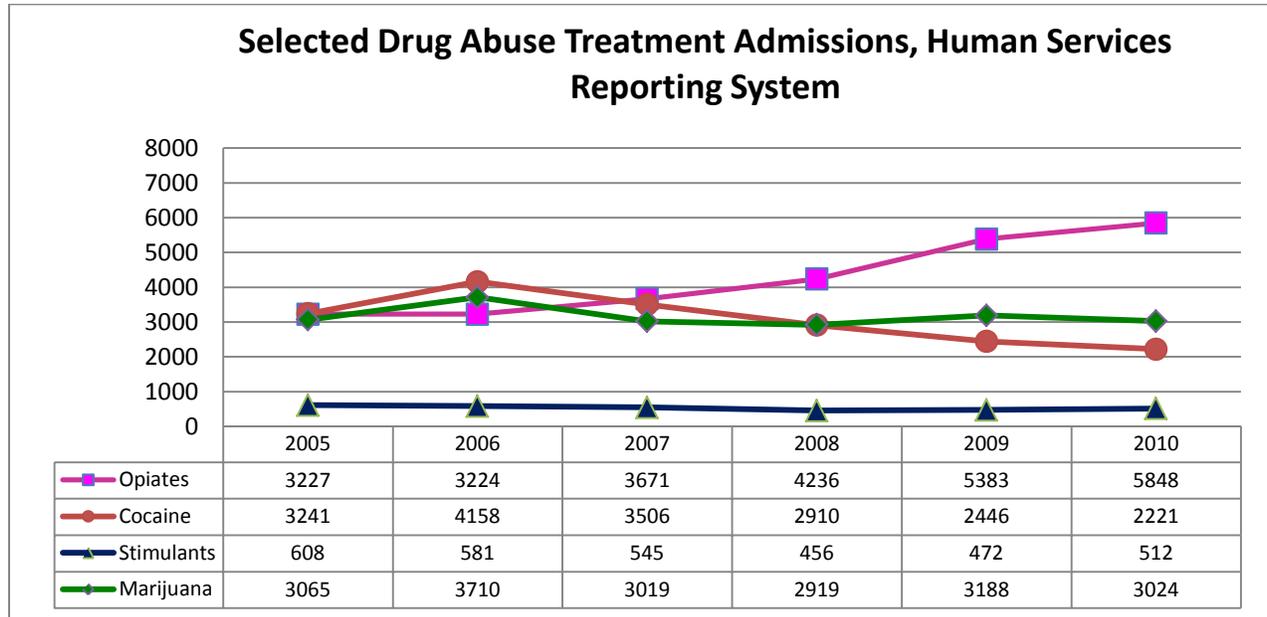
Opiates

Indicators of opiate problems, including heroin and the nonmedical use of medications like morphine and codeine, have risen recently. Prior to the 1980s, opiates topped the list of Wisconsin substance abuse issues, giving way to cocaine in the 1980s and methamphetamines in 2000. The resurgence of opiate-related problems causing emergency room visits, crime, homicides, high school drop-outs and loss of employment has public health, criminal justice and policy officials concerned.

While the Wisconsin sample size is small and annual rates may be subject to variations caused by the small samples, the chart below on past year opiate use from the National Survey on Drug Use and Health does not depict a discernible trend in reported nonmedical opiate use in Wisconsin.⁹



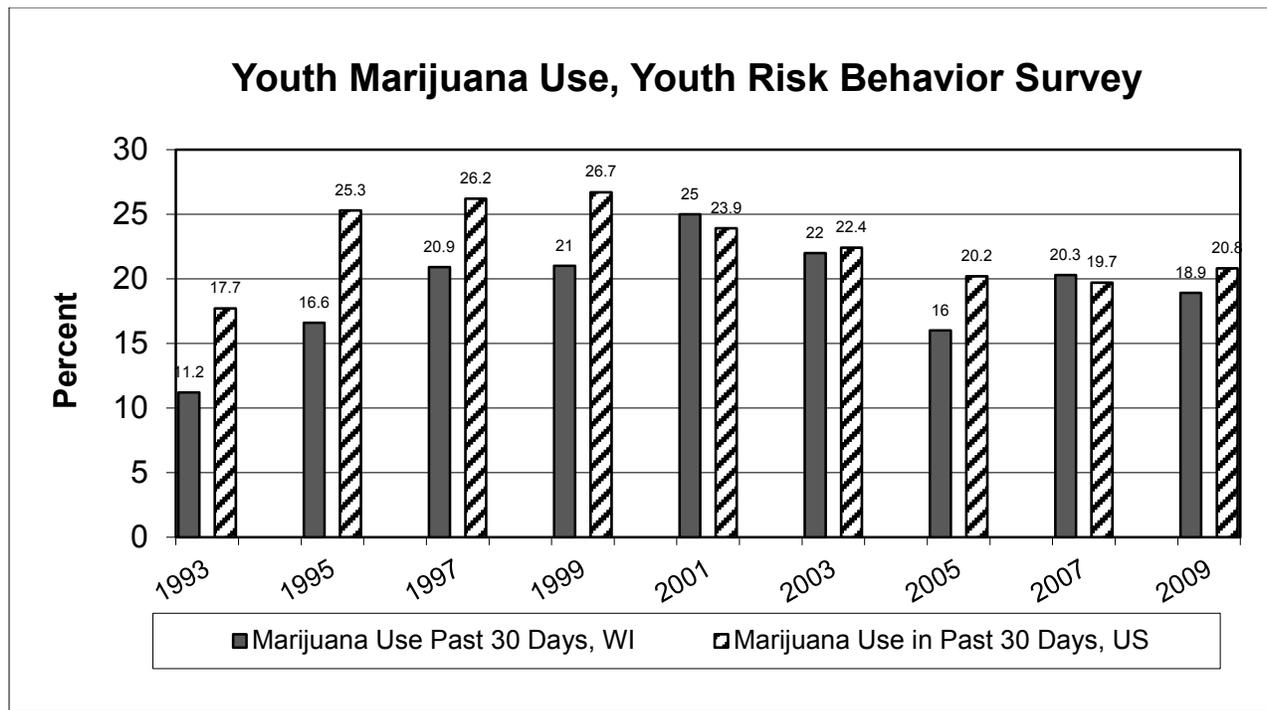
Another indicator of the opiate problem is admissions to treatment. The Human Services Reporting System (HSRS) is Wisconsin's statewide client information database that contains demographic, presenting problems, service and outcome data on clients receiving county-authorized services for substance abuse or mental health needs. This system indicates that there are heroin or other opiate abusers in every county. Depicted in the chart that follows are six-year trends in publicly supported treatment admissions for three selected drug categories.¹⁰ Opiate admissions are trending upward while cocaine and methamphetamine admissions are down. Data are not yet available from state Medicaid or private health insurance databases.



The minimum annual prevalence of Wisconsin adults needing treatment for heroin or other opiate addiction can be estimated from the National Survey on Drug Use and Health and a 2002 study published in the Human Psychopharmacology journal at 0.8% or 30,450 persons.^{9,11}

Marijuana

Commonly called pot, grass, THC, cannabis, weed, hemp or hash, marijuana is a hallucinogenic, habit-forming drug which causes impairment in short-term memory, euphoria, increased appetite, intensification of the senses, bloodshot eyes, reduced coordination, dizziness, lowered blood pressure and lethargy. Even small amounts of marijuana can impair cognitive and psychomotor tasks associated with driving.¹² The psychoactive chemical in marijuana, tetrahydrocannabinol or Dronabinol, may be useful in the treatment of glaucoma and the nausea caused by cancer medications. In addition to dependence, the effects of long-term marijuana use include depression, indifference, panic attacks, mood swings, paranoia, hallucinations or psychotic reactions, bronchitis, decrease in the production of the male sex hormone testosterone, reduced sperm count, epileptic seizures, impaired memory and judgment, inability to concentrate, apathy, lack of ambition, damage to the body's immune system, miscarriage or infant defects, lung lesions, asthma, lung disease, and irreversible damage to brain cells.¹³ In 2010, there were nine Wisconsin deaths attributed to marijuana use. From the Wisconsin Department of Public Instruction's and the Federal Center for Disease Control's Youth Risk Behavior Survey taken every two years, the chart below presents the percent of Wisconsin and U.S. high school youth who report using marijuana at least once in the past 30 days.¹⁴ While Wisconsin teen marijuana use is trending downward in the past 10 years and is lower than the national average, 1 in 5 youth report using the substance.



Other Mood-altering Drugs

The nonmedical or illicit use of other mood-altering, habit-forming, controlled substances also causes public health and safety issues in Wisconsin. There are essentially five categories of these substances: (1) heroin, morphine, codeine narcotic or opiate-based pain relievers; (2) stimulants such as cocaine and methamphetamine; (3) benzodiazepine tranquilizers that relax the muscles; (4) barbiturate sedatives and sleeping pills; and (5) hallucinogens like marijuana, LSD, and PCP. All of these substances are highly addictive and cause significant health and social problems. Opiates, marijuana, and cigarette smoking have been selected for further analysis. The Wisconsin Department of Health Services has a significant role in smoking prevention, and Substance Abuse Block Grant funding is tied to reducing sales of cigarettes to minors.

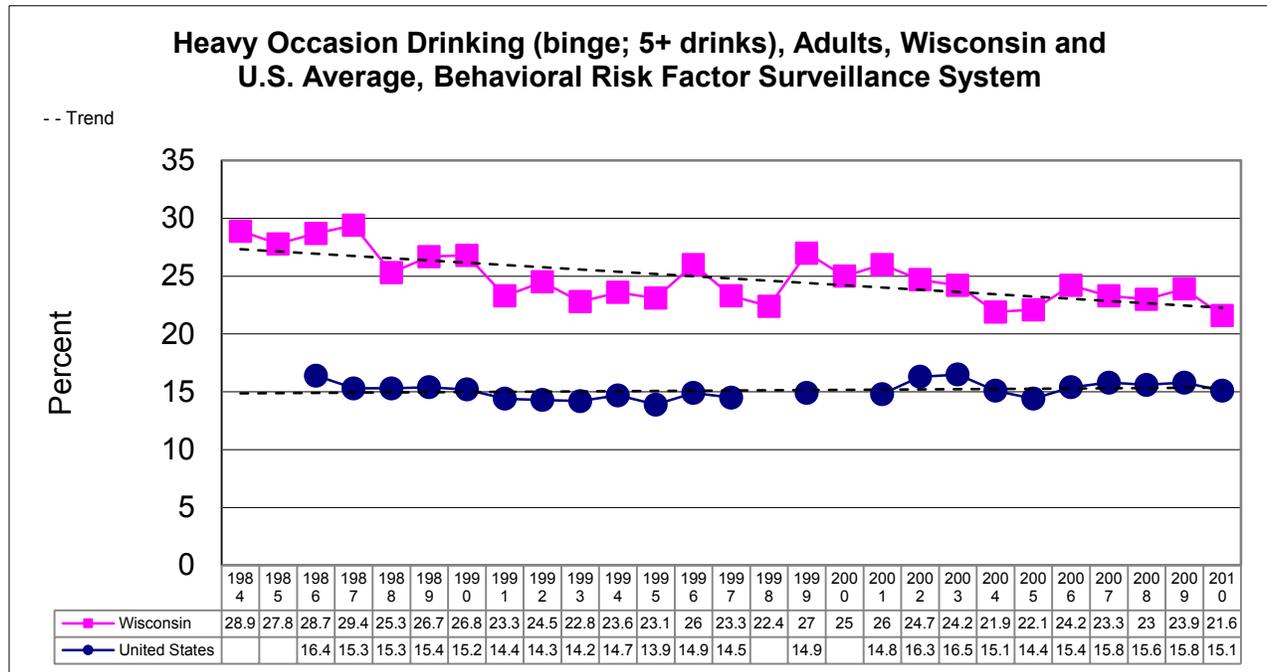
The Wisconsin Division of Mental Health and Substance Abuse (DMHSAS) has received anecdotal reports from stakeholders that synthetic marijuana (K2 or spice) and stimulants (bath salts) are being abused in Wisconsin. They are often sold in legal retail outlets as “herbal incense.” The effects of synthetic marijuana can be similar to marijuana and also include agitation, extreme nervousness, nausea, vomiting, tachycardia (fast, racing heartbeat), elevated blood pressure, tremors and seizures, and hallucinations. According to data from the national 2011 Monitoring the Future survey of youth drug-use trends, 11.4% of 12th graders used K2 or spice in the past year, making it the second most commonly used illicit drug among high school seniors. Bath salts contain manmade chemicals related to amphetamine stimulants known as cathinones. Similar to the adverse effects of cocaine, LSD and methamphetamine, bath salt use is associated with increased heart rate and blood pressure, extreme paranoia, hallucinations, and violent behavior, which causes users to harm themselves or others. Bath salts use is reported by 1.3% of 12th graders.¹¹⁴

Binge Drinking

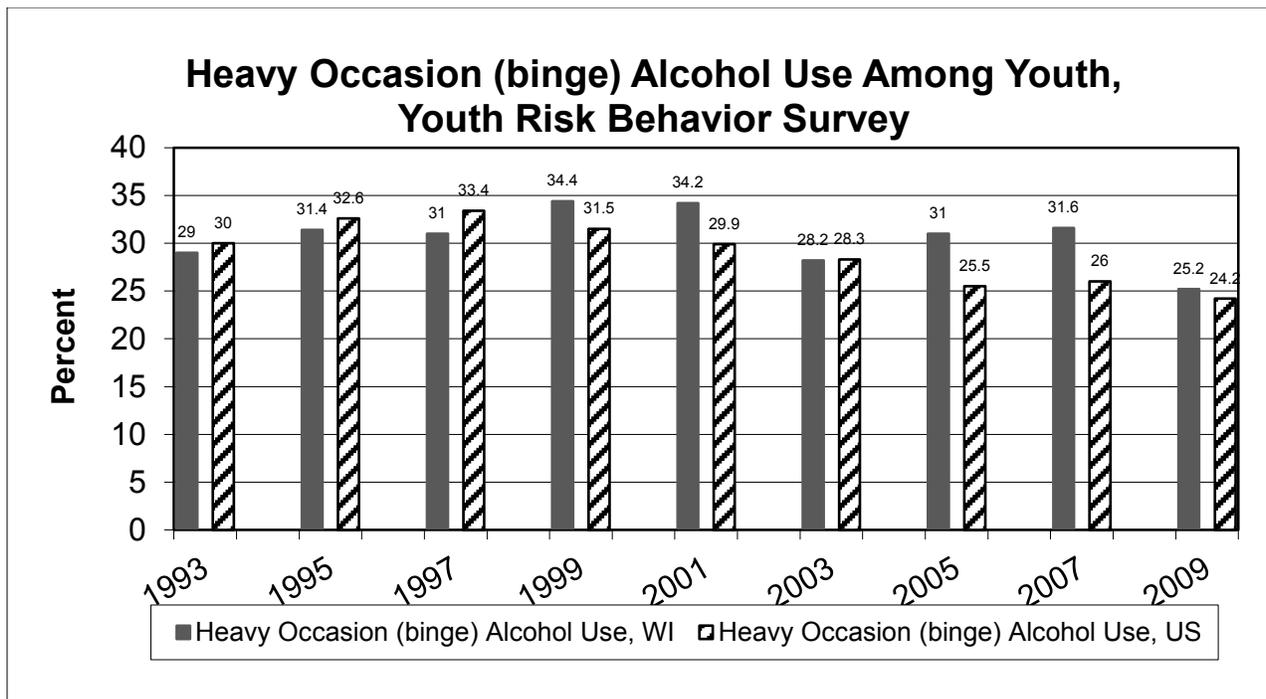
Another substance abuse issue in Wisconsin is heavy occasion, or binge, drinking. Binge drinking for males means having 5 or more drinks on an occasion of drinking; for females it is 4 or more drinks. A male who has 5 drinks in a 3-hour period will have a blood alcohol concentration of .05 (.07 within 2 hours); a female who has 4 drinks in a 3-hour period of time will have a blood alcohol content (BAC) of .05 (.08 within 2 hours). At a BAC of just .02, experiments have demonstrated that people experience some impaired judgment, decreased

reaction time, a decline in their visual ability to track a moving object, and a reduced ability to perform 2 tasks at the same time. At the .05 BAC level, people begin to exhibit more risk-taking behavior, drowsiness, loss of small muscle control, loss of coordination, more impaired judgment and more impaired reaction time.¹⁵

The chart below tracks Wisconsin and U.S. adult binge drinking rates over the past 25 years.¹⁶ While Wisconsin’s rate of binge drinking in the past month exceeds the national rate by over 6 percentage points, Wisconsin’s trend is moving in a positive direction – downward. According to the Wisconsin Behavior Risk Factor Surveillance System survey, in 2010 there were 923,000 Wisconsin adults who reported at least one occasion of binge drinking in the past 30 days. The difference between the Wisconsin and national rate calculates to an additional 278,000 Wisconsin binge drinkers.

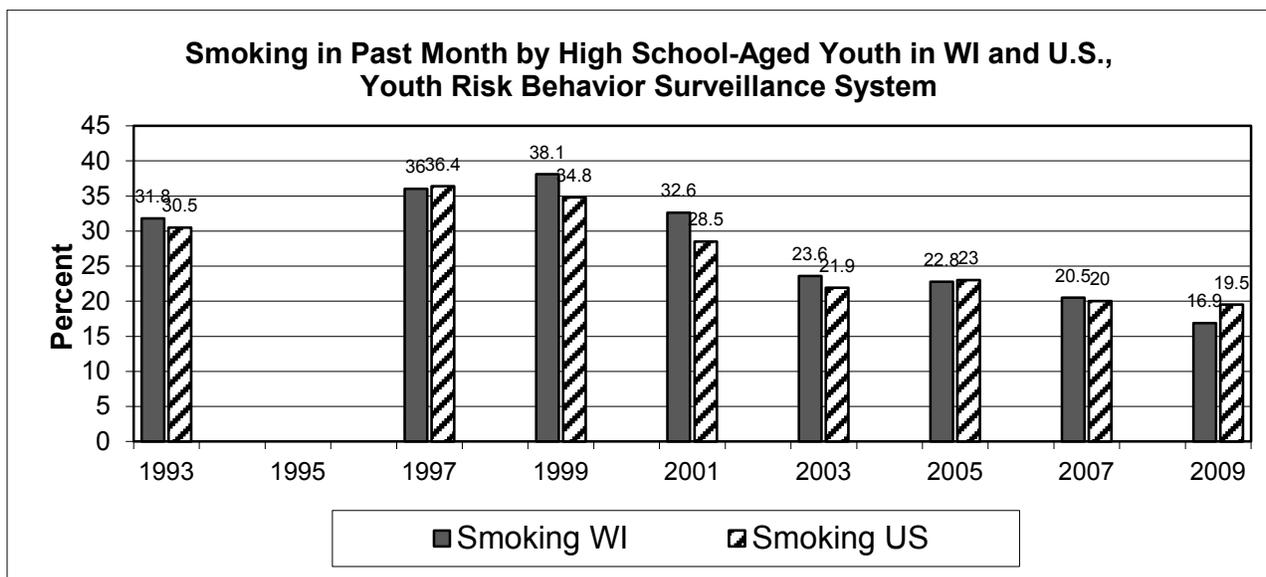


Youth (high school age) binge drinking from the biennial Youth Risk Behavior Survey is displayed in the next chart.¹⁴ Some 73,500 Wisconsin youth reported binge drinking in the past 30 days. The trend is downward since 2001, and in 2009 the difference between the Wisconsin and the U.S. average rate accounts for an additional 3,000 Wisconsin youth who binge drink. Addressing binge drinking among youth is a Wisconsin priority.



Tobacco

According to the Federal Centers for Disease Control, tobacco use is the leading cause of death and disease in the United States, with 443,000 deaths annually attributed to smoking or exposure to secondhand smoke. Nearly all tobacco use begins during youth and young adulthood. One of the conditions of Wisconsin's receipt of Federal substance abuse block grant funds is preventing the sale of cigarettes to underage persons. Called the Federal "Synar Amendment," the Wisconsin Department of Health Services must conduct merchant education activities and cigarette purchase "stings" among merchants and reduce cigarette purchases by youth to less than 20% during the stings. Wisconsin is subject to a 40% block grant fund penalty if the requirements are not met. In 2011, the national youth purchase rate was 8.5%, and Wisconsin's rate was 4.5%, well below the required rate. For these reasons it is important to track cigarette use among youth. As represented in the chart below, cigarette use among Wisconsin youth is trending downward and in 2009 is below the national rate.¹⁴

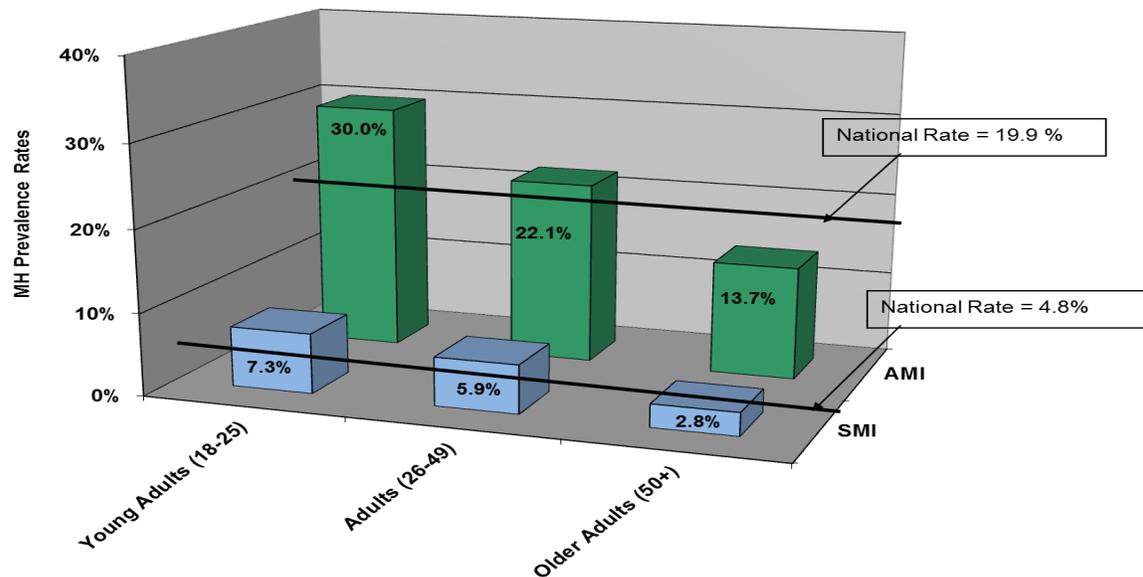


Special Population Groups – Mental Health

For the purpose of distinguishing groups that may have relatively high mental health needs, the prevalence rates for different demographic and other special population groups are described below. No single data source produces mental health prevalence rates for a large variety of special population groups, but the NSDUH measures prevalence rates for basic demographic groups on a national basis. The national rates are examined here because the NSDUH rates for Wisconsin are not available for all demographic groups.

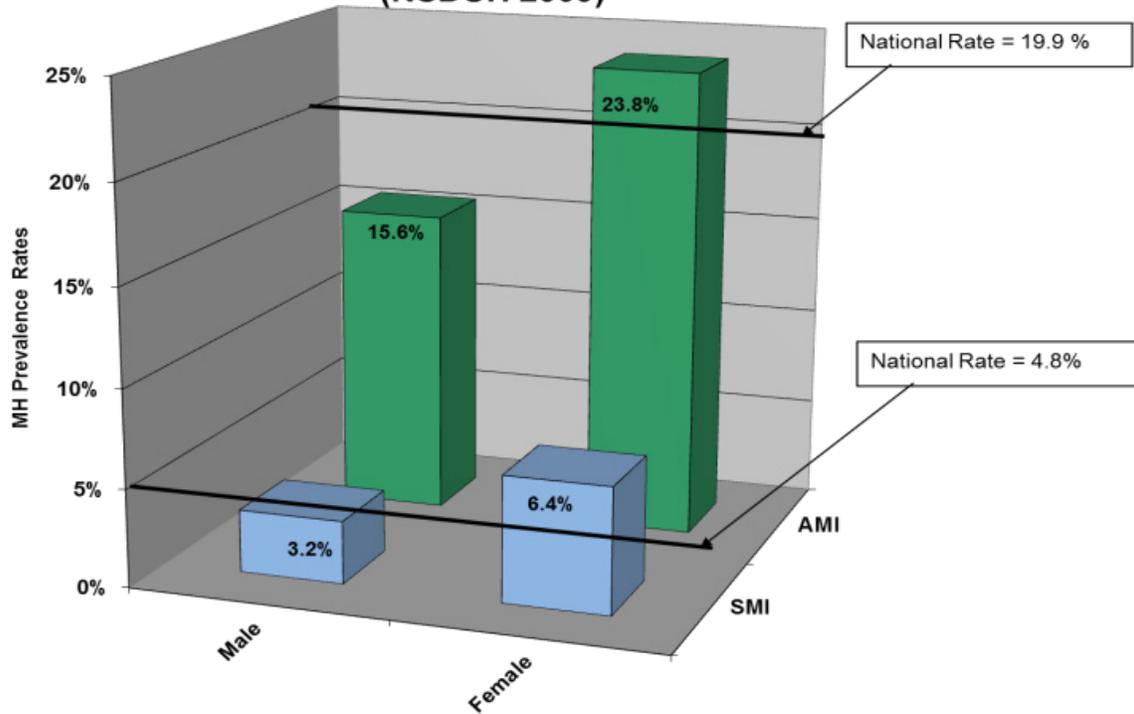
The 2009 NSDUH results in the charts below describe both prevalence rates for AMI and SMI for a nationally representative sample of adults. Relative to the national 19.9% rate of AMI, young adults, ages 18-25, have significantly higher rates of AMI, and older adults' rates are significantly lower². Females also have significantly higher rates of AMI than males. When racial and ethnic groups are examined, Native Americans have the highest rate of mental illness, Asians have the lowest, and African-Americans and people of Hispanic origin have slightly lower than average rates. The relationship between all of these demographic groups for serious mental illness (SMI) rates is parallel to that of AMI rates.

12-Month Adult Mental Health Prevalence Rates for Age Groups (NSDUH 2009)

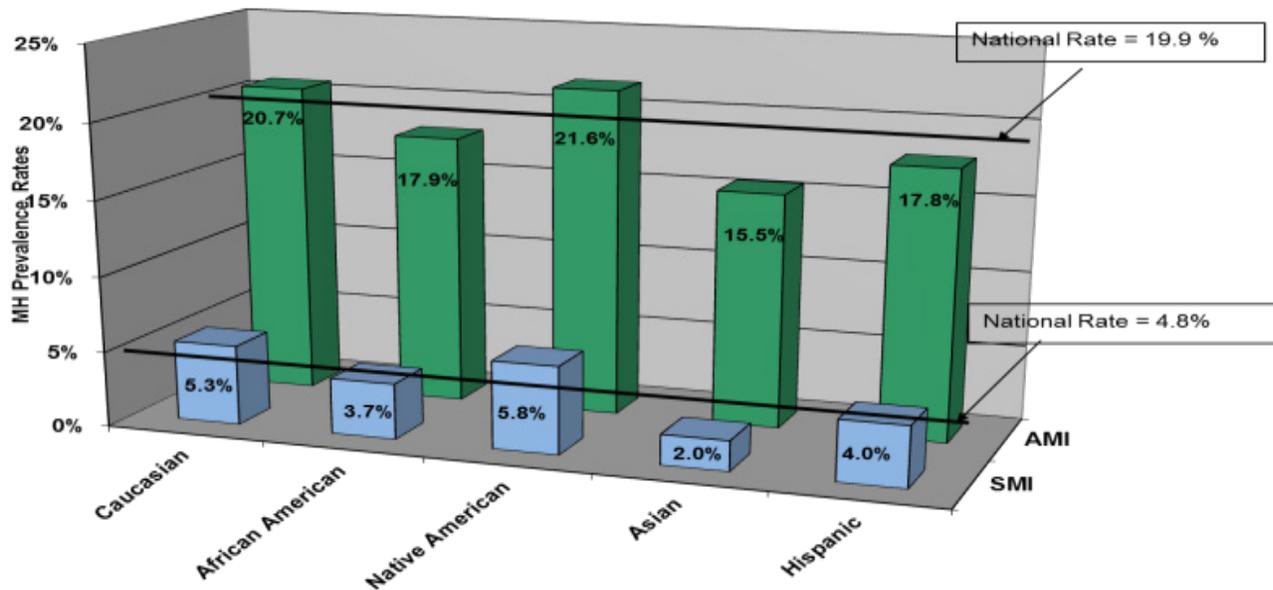


12-Month Adult Mental Health Prevalence Rates by Gender

(NSDUH 2009)



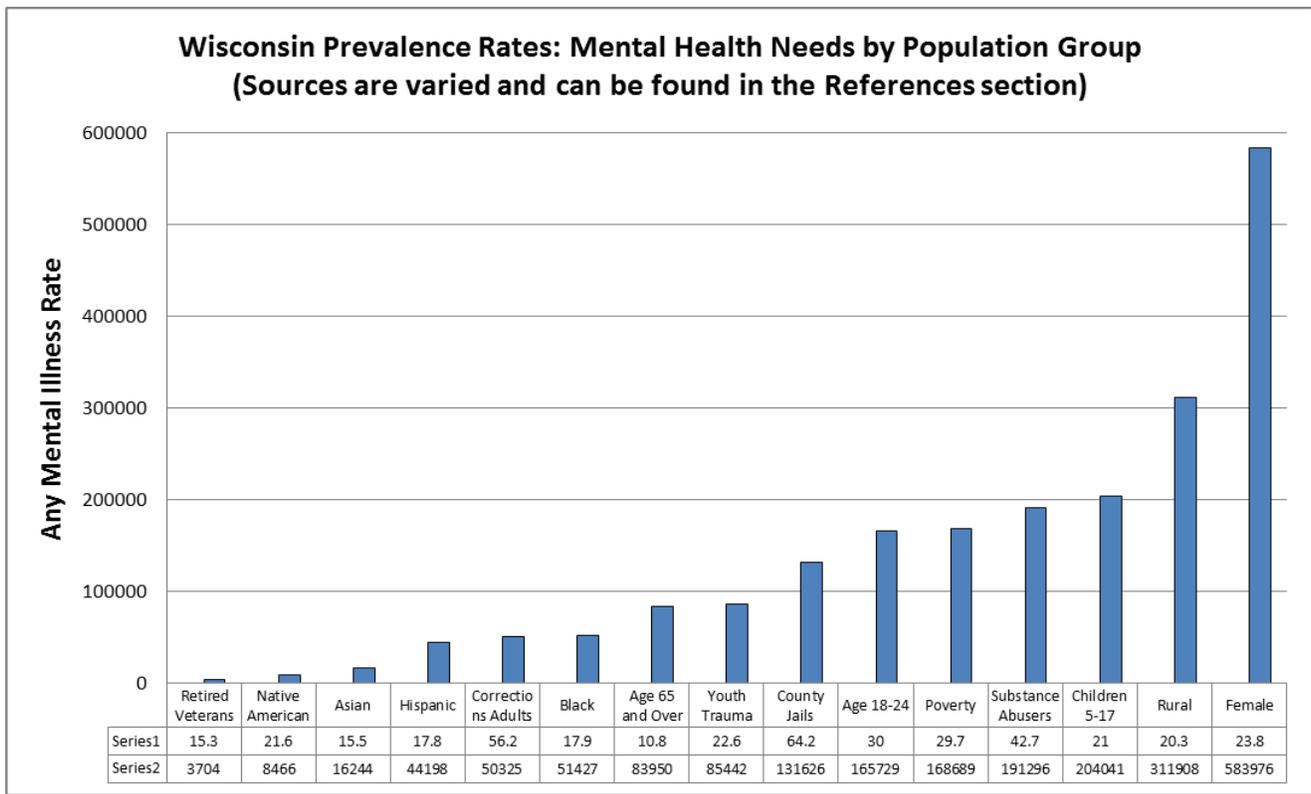
12-Month Adult Mental Health Prevalence Rates for Racial/Ethnic Groups (NSDUH 2009)



The chart below shows the estimated number of persons in Wisconsin having any mental illness for a variety of selected special populations, including the demographic groups described above with the highest rates of mental illness. The prevalence rate (%) within each special population group is also presented in the data table. Where

available, the National Survey on Drug Use and Health data were used for the estimates² and other sources were used when NSDUH data were not available.¹⁷⁻¹⁹ The prevalence rates were applied to the Wisconsin population 2011 figures. The special populations are listed in ascending order by the estimated number of persons with AMI.

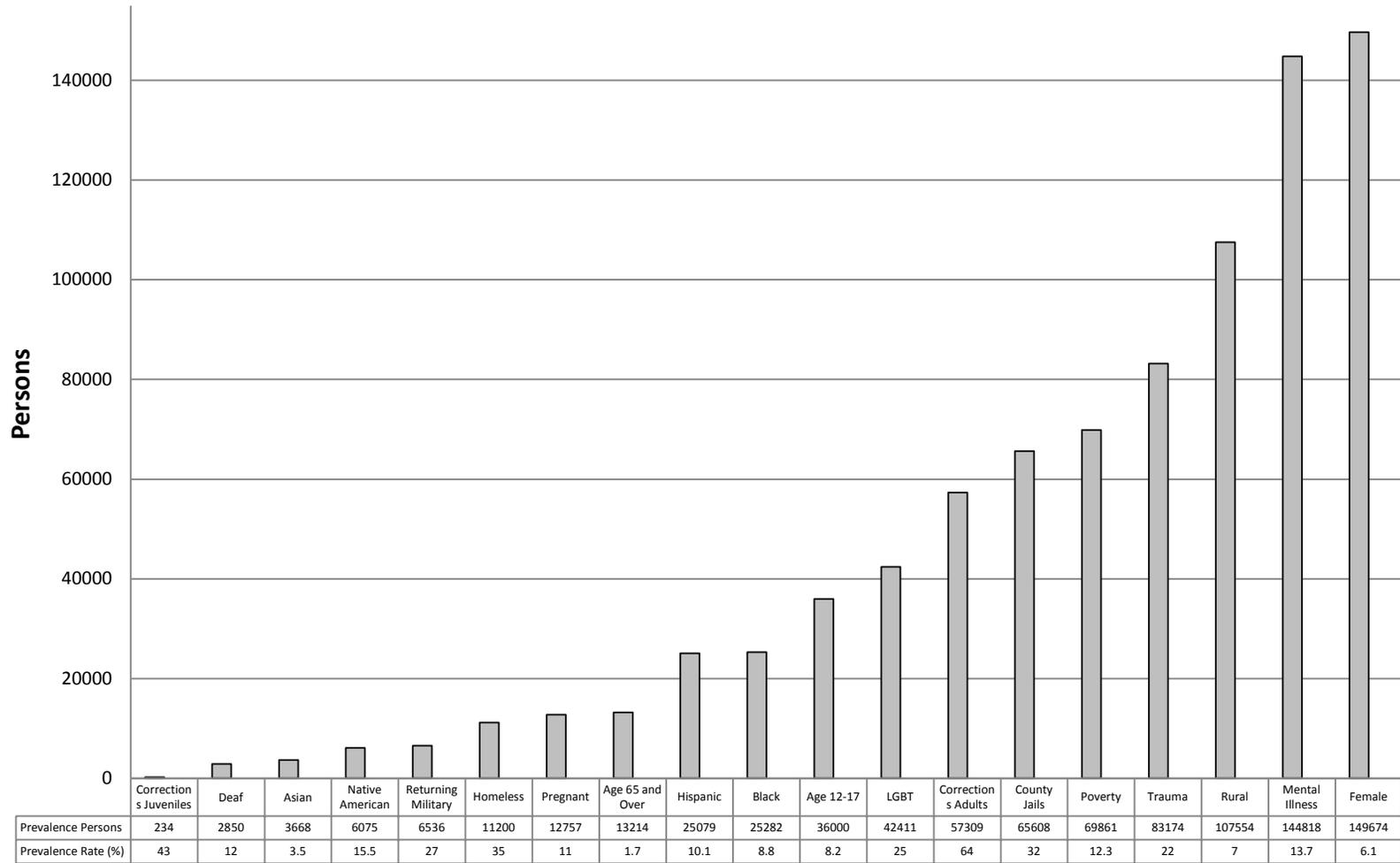
While females and people living in rural areas do not have the highest rate of AMI, they have the highest number of persons with AMI by far because they comprise a large percentage of the state’s population. Other groups that have a relatively high number of people with AMI, but also have a higher than average rate of AMI, include young adults aged 18-24 and people in poverty. Populations with the highest rates of AMI include people in state correctional facilities, people in local jails, and people who abuse substances. People who abuse substances not only have a high rate of mental illness (42.7%), but they also comprise the fourth largest special population examined here.



Special Population Groups – Substance Abuse

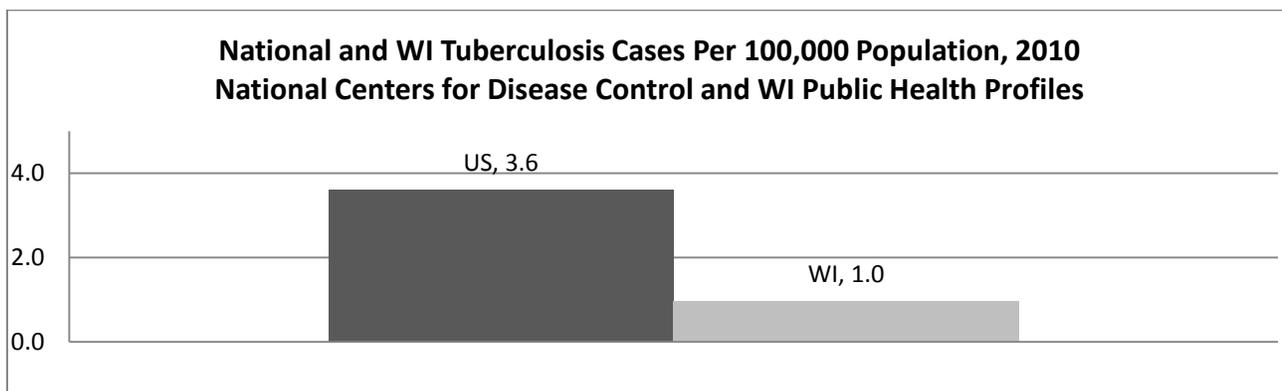
The chart on the next page shows the estimated number of persons having a substance use disorder for each of 19 selected target populations. The prevalence rate (%) or concentration of substance abuse within each special population group is also presented in the data table. Where available, the National Survey on Drug Use and Health was used for the estimate. Other sources include the Department of Defense, Surgeon General, Wisconsin surveys and other studies.^{9, 19-32} While the concentration of substance use disorders is highest among corrections, criminal offenders, homeless, returning veterans and LGBT populations, the total number of persons having a substance use disorder among our selected special populations is highest among females, persons having a mental illness, rural populations, persons experiencing severe trauma or trauma-related disorders and persons living in poverty. Other populations such as those who are White, male, living in urban areas and having an alcohol use disorder were not included in the chart because they traditionally make up a large percentage of persons served by Wisconsin’s substance abuse services system.

**Prevalence Persons: Occurrence of Substance Use Disorders by Population Group
(Sources are varied and can be found in the References section)**



Tuberculosis

Tuberculosis (TB) is an infectious disease that is caused by a bacterium. TB primarily affects the lungs, but it can also adversely affect organs in the central nervous system, lymphatic system, and circulatory system. Active TB is contagious and spread from person to person through airborne particles. If an infected person coughs, sneezes, shouts, or spits, the bacteria can enter the air and come into contact with uninfected people who breathe the bacteria into their lungs. Medications are available to completely eradicate the TB bacterium from the body. TB is a Federal priority. It is important to consider the prevalence of TB in a substance abuse needs assessment analysis because the poor, the homeless, jail inmates, alcoholics, intravenous drug users and health care workers are at higher risk of contracting TB. In 2010, the Federal Centers for Disease Control's National TB Surveillance System showed that Wisconsin's overall rate of TB is much lower than the national rate (see the chart below).³³ About 55 new persons contract TB each year in Wisconsin.



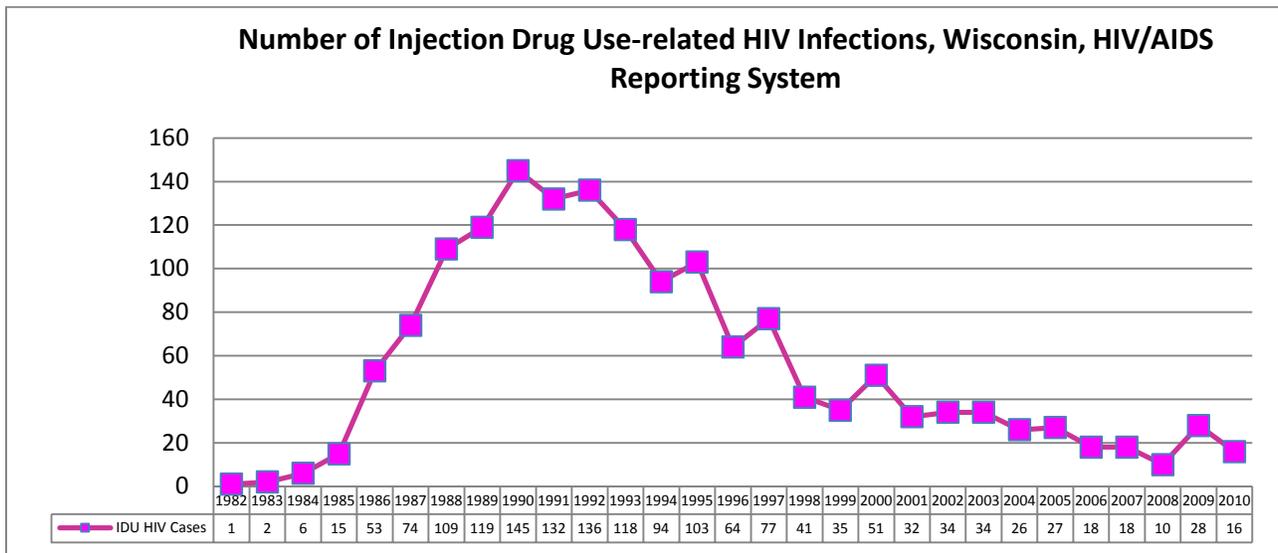
Hepatitis C

Hepatitis C is a disease caused by a virus that infects the liver. If untreated, it can lead to liver damage, including liver cirrhosis, liver cancer, and liver failure. Many people don't know that they have hepatitis C until they already have some liver damage and this can take many years. Some people who get hepatitis C have it for a short time and then get better. Hepatitis C is spread by contact with an infected person's blood such as sharing needles and other equipment used to inject illegal drugs. This is the most common way to get hepatitis C in the United States. In about 15 percent of hepatitis C cases, the body's immune system is able to completely destroy the virus. Building up the immune system and medication can prevent infections and are a common course of treatment. Although hepatitis C can be very serious, most people can manage the disease and lead full, active lives. The Federal Centers for Disease Control's Viral Hepatitis Statistics and Surveillance Data for 2006-2010 showed a rise in Wisconsin hepatitis C cases from 3 or fewer in 2006 to 10 in 2010.³⁴ However, the Wisconsin 2010 rate per 100,000 people (0.2) is still lower than the national average of 0.3 cases per 100,000.

HIV

HIV infection is a communicable disease caused by the human immunodeficiency virus (HIV) which damages the body's immune system, the system that fights infections. Without the immune system's protection, the body is defenseless against serious and potentially life-threatening diseases which can lead to the development of Acquired Immune Deficiency Syndrome (AIDS), the later stage of HIV infection. HIV is transmitted through contact with infected body fluids, including sharing needles and/or syringes for injecting drugs like heroin with someone who is infected. Early treatment with antiviral and other related medications can slow the progression of HIV disease and the development of AIDS. Because there is no medication that rids HIV from the body, most infected persons will need to take HIV medications their entire lives. HIV infections related to injection

drug use are an important indicator of the impact of public health measures and, in part, substance abuse prevention and treatment. The chart that follows presents 30-year trends in new Wisconsin HIV infections related to injecting drugs. Since 1990, the trend has been downward with a leveling off occurring in the last 5 years.³⁵



Pregnancy and Birth Effects

A University of Wisconsin study³⁶ found that 3% of pregnant women used mood altering drugs (marijuana, opiates or cocaine) during pregnancy. The National Survey on Drug Use and Health found that 5% of pregnant women in the U.S. reported using marijuana during pregnancy. The University of Wisconsin study also found that 32% of women use alcohol during pregnancy. While fetal drug effects are not to be discounted, fetal alcohol spectrum disorders are the prominent health issue in Wisconsin. Fetal drug effects are less of an issue because the adverse health and neurobehavioral effects are more temporary (early infancy and early childhood) and not long-term as they are with alcohol.³⁷ There is a higher risk of stillbirth, miscarriage, low birth weight, painful infant withdrawal, and sudden infant death syndrome with heavy marijuana, opiate or cocaine use. With fetal alcohol syndrome, mental retardation and microcephaly are very permanent effects.

In Wisconsin, 2 of every 1,000 births have fetal alcohol syndrome and an additional 8 of every 1,000 births have alcohol-related neurobehavioral disorders. That translates to 682 births each year that are negatively affected by alcohol. There are an estimated 17,060 persons in Wisconsin between the ages birth to 18 years that have learning disabilities, heart defects, epilepsy, ADHD, autism or cerebral palsy related to alcohol-related birth effects. The annual health, special education and human service costs resulting from fetal alcohol spectrum disorders is estimated to be \$28,660,800 in Wisconsin.³⁸

Pathological Gambling

Pathological gambling is an important concern in Wisconsin. There are many commonalities between problem gambling and addiction and as such they are treated using similar methods.

Gambling was legalized in Wisconsin beginning with the lottery in 1988. Several greyhound racing parks opened in 1989 and all had shut down by 2010. Tribal compacts for casinos were established in 1991 and 1992. Gambling is a widespread activity and most people gamble responsibly. People who gamble responsibly set and stick to loss, time, and money limits, balance gambling with other leisure activities' limits, do not gamble

with household money needed for everyday expenses, do not borrow money in order to gamble and do not gamble when they are stressed. Studies indicate that 1.1% of the adult population has a pathological gambling disorder and an additional 2.8% are problem gamblers all of whom are in need of intervention or treatment. Problem gambling is defined as gambling resulting in a pattern of negative health, financial or social consequences to the gambler, his or her family, employer, or community. Teen rates of problem gambling are higher than for adults. Approximately 4% to 8% of youth between 12 and 17 years of age have a gambling problem and another 10% to 15% are at risk. In Wisconsin there are an estimated 232,525 problem gamblers. The societal costs of problem gambling to Wisconsin are estimated at \$10,000 per problem gambler.¹¹⁰⁻¹¹²

Since 1993, the Wisconsin Council on Problem Gambling has promoted public awareness and education on problem gambling. The Council staffs a 24-hour helpline (1-800-GAMBLE-5), hosts an annual conference, conducts two series of gambling counselor professional training, and many other statewide and community activities. The helpline refers callers to local Gamblers Anonymous and Gam-Anon groups, trained counselors, crisis centers, and other community resources. To show the growth of the gambling problem in Wisconsin, calls to the Council's helpline have more than tripled from 3,865 in 1997 to 13,528 in 2011.

Several studies show that approximately 50% of problem gamblers were found to also have drug or alcohol problems. Studies of people in treatment for substance abuse have found 10% to 30% also have a gambling problem. The problem gambler gets the same effect from gambling as a substance abuser gets from using cocaine or having a drink. The gambling alters the person's mood and the gambler keeps repeating the behavior attempting to achieve that same effect. And just as tolerance develops to drugs or alcohol, the gambler finds that it takes more and more of the gambling experience to achieve the same effect. Gamblers experience withdrawal symptoms such as anxiety, irritability and sleeplessness when deprived of gambling.¹¹³

In 2008, just 15 females and 13 males received problem gambling counseling and were reported in the Human Services Reporting System (HSRS); 20 females and 12 males were reported in the Medicaid Management Information System. It is unknown how many persons received problem gambling treatment covered by private insurance. Nonetheless, these numbers are unusually low, therefore, access to gambling treatment services is an issue that should be considered.

Geographic Differences – Mental Health

Although county-level measures of mental illness are not available, state and national rates can provide estimates of the number of individuals in counties with mental illness. In the table below, the number of adults and children with AMI and SMI/SED is estimated using the Wisconsin-specific adult rates from the NSDUH (19.0%; 4.6%) and the national children's rates from the MECA Study (21.0%; 11.0%). Since these prevalence rates are not specific to differences among Wisconsin's counties, the following table is only meant to provide a general approximation.

Wisconsin County-Level Estimates of Individuals with Serious Mental Health Needs within a Year

County	Estimated Number of Adults w/AMI (19.0%)	Estimated Number of Adults w/SMI (4.6%)	Estimated Number of Children w/AMI (21.0%)	Estimated Number of Children w/SED (11.0%)
Adams	3,300	799	532	278
Ashland	2,362	572	567	297
Barron	6,810	1,649	1,542	808
Bayfield	2,328	564	455	238
Brown	35,980	8,711	9,399	4,923
Buffalo	2,015	488	460	241
Burnett	2,377	576	469	246
Calumet	6,905	1,672	2,061	1,079
Chippewa	9,157	2,217	2,224	1,165
Clark	4,687	1,135	1,520	796
Columbia	8,335	2,018	2,048	1,073
Crawford	2,478	600	579	303
Dane	74,123	17,946	15,918	8,338
Dodge	13,191	3,194	3,021	1,583
Door	4,338	1,050	783	410
Douglas	6,596	1,597	1,430	749
Dunn	6,674	1,616	1,373	719
Eau Claire	15,062	3,647	3,121	1,635
Florence	700	169	122	64
Fond du Lac	15,037	3,640	3,554	1,862
Forest	1,374	333	319	167
Grant	7,700	1,864	1,633	855
Green	5,337	1,292	1,374	720
Green Lake	2,807	680	680	356
Iowa	3,396	822	877	460
Iron	935	226	158	83
Jackson	3,027	733	706	370
Jefferson	12,203	2,954	3,071	1,609
Juneau	4,009	971	873	457
Kenosha	23,730	5,745	6,632	3,474
Kewaunee	3,011	729	757	397
La Crosse	17,357	4,202	3,665	1,920
Lafayette	2,386	578	659	345
Langlade	2,987	723	643	337
Lincoln	4,262	1,032	988	518
Manitowoc	12,014	2,909	2,801	1,467
Marathon	19,360	4,687	5,008	2,623
Marinette	6,345	1,536	1,324	693
Marquette	2,350	569	486	255
Menominee	551	133	206	108
Milwaukee	135,895	32,901	34,969	18,317
Monroe	6,352	1,538	1,764	924
Oconto	5,556	1,345	1,297	679
Oneida	5,578	1,350	1,008	528
Outagamie	25,463	6,165	6,800	3,562
Ozaukee	12,677	3,069	3,241	1,698

County	Estimated Number of Adults w/AMI (19.0%)	Estimated Number of Adults w/SMI (4.6%)	Estimated Number of Children w/AMI (21.0%)	Estimated Number of Children w/SED (11.0%)
Pepin	1,086	263	259	136
Pierce	6,073	1,470	1,380	723
Polk	6,424	1,555	1,600	838
Portage	10,600	2,566	2,192	1,148
Price	2,163	524	426	223
Racine	28,017	6,783	7,414	3,883
Richland	2,629	637	632	331
Rock	22,955	5,558	6,110	3,200
Rusk	2,166	524	506	265
St. Croix	11,805	2,858	3,537	1,853
Sauk	9,038	2,188	2,270	1,189
Sawyer	2,504	606	517	271
Shawano	6,176	1,495	1,463	766
Sheboygan	16,727	4,050	4,230	2,216
Taylor	2,974	720	768	402
Trempealeau	4,189	1,014	1,057	554
Vernon	4,206	1,018	1,199	628
Vilas	3,367	815	581	304
Walworth	15,075	3,650	3,690	1,933
Washburn	2,424	587	488	255
Washington	19,113	4,627	5,034	2,637
Waukesha	56,794	13,750	14,940	7,826
Waupaca	7,793	1,887	1,836	962
Waushara	3,758	910	761	399
Winnebago	25,054	6,066	5,459	2,860
Wood	11,026	2,669	2,573	1,348
Wisconsin Total	833,256	201,736	204,041	106,879

Geographic Differences – Substance Abuse

An analysis of geographic differences in rates of substance abuse in Wisconsin must draw on data from several related substance abuse indicators studies as a survey sample sizes are generally too small (and cost-prohibitive) to accurately estimate this prevalence at the county level. A University of Wisconsin study³⁹ found that the estimated rate of substance abuse prevalence among counties ranged from 7.7% (Washington County) to 13.3% (Waupaca County). The spread is about half the overall Wisconsin prevalence rate indicating that there are meaningful differences in substance abuse prevalence and prevalence rates among counties. The average prevalence rate among large urban counties (i.e., Milwaukee, Dane, Waukesha, Brown, Racine, Rock, Winnebago, Outagamie and Kenosha) did not differ from the overall state prevalence rate. Small rural counties (i.e., Adams, Ashland, Buffalo, Burnett, Crawford, Florence, Iron, Jackson, Lafayette, Marquette, Pepin, Price, Rusk, Sawyer and Washburn) averaged about a percentage point above the state prevalence rate.

Another University of Wisconsin study⁴⁰ analyzed geographic differences among substance abuse indicator rates such as drug and OWI arrests, liquor law violations, alcohol and drug-related hospitalizations and alcohol-related deaths and found Washington County at about the state average and Waupaca County below the state average. Most large urban counties were above the state average and two-thirds of the small rural counties were below the state average. When looking at only alcohol-related indicator rates such as traffic crashes and fatalities, liquor licenses, and other alcohol deaths, the study found Washington County below the state average and Waupaca County above the state average. On the alcohol-only indicators, the large urban counties were all below the state average, however, 85 percent of the small rural counties were above the state average.

The number and density of bars, taverns and liquor stores in communities has been shown to correlate with alcohol-related problems such as assault, traffic crashes, injury, suicide and child abuse.⁴¹⁻⁵⁰ Communities with higher concentrations of alcohol outlets (per capita) have higher concentrations of alcohol-related problems. The table on the next page, prepared by the Wisconsin Office of Health Informatics and University of Wisconsin Population Health Institute, shows Wisconsin county-level information about the number of alcohol sales licenses in relation to the number of people in the county. Counties with alcohol sales license densities well above the state average include Ashland, Bayfield, Buffalo, Burnett, Door, Florence, Forest, Iron, Menominee, Oneida, Pepin, Price, Rusk, Sauk, Vilas and Washburn.

Alcohol License Density by County, Wisconsin, 2011-2012⁵¹

County	2011 Population	2011-2012 Licenses Issued	Licenses per 500 Population
Adams	20,935	100	2.4
Ashland	16,064	115	3.6
Barron	45,925	163	1.8
Bayfield	15,036	150	5.0
Brown	249,192	662	1.3
Buffalo	13,620	84	3.1
Burnett	15,448	97	3.1
Calumet	49,109	128	1.3
Chippewa	62,610	228	1.8
Clark	34,719	141	2.0
Columbia	56,850	179	1.6
Crawford	16,600	96	2.9
Dane	489,331	1,110	1.1
Dodge	88,789	277	1.6
Door	27,765	248	4.5
Douglas	44,176	210	2.4
Dunn	43,787	109	1.2
Eau Claire	99,012	241	1.2
Florence	4,337	43	5.0
Fond du Lac	101,740	307	1.5
Forest	9,180	83	4.5
Grant	51,280	202	2.0
Green	36,884	108	1.5
Green Lake	19,091	89	2.3
Iowa	23,720	101	2.1
Iron	5,828	89	7.6
Jackson	20,475	99	2.4
Jefferson	83,794	277	1.7
Juneau	26,725	136	2.5
Kenosha	166,632	400	1.2
Kewaunee	20,594	104	2.5
La Crosse	114,919	324	1.4
Lafayette	16,880	81	2.4
Langlade	19,901	116	2.9
Lincoln	28,668	154	2.7
Manitowoc	81,406	288	1.8
Marathon	134,414	410	1.5
Marinette	41,719	227	2.7
Marquette	15,392	71	2.3
Menominee	4,202	27	3.2
Milwaukee	948,369	1,960	1.0
Monroe	44,877	132	1.5
Oconto	37,723	196	2.6

County	2011 Population	2011-2012 Licenses Issued	Licenses per 500 Population
Oneida	35,962	259	3.6
Outagamie	177,455	491	1.4
Ozaukee	86,530	215	1.2
Pepin	7,461	47	3.1
Pierce	41,085	121	1.5
Polk	44,244	159	1.8
Portage	70,370	227	1.6
Price	14,000	102	3.6
Racine	195,225	504	1.3
Richland	18,045	54	1.5
Rock	160,287	326	1.0
Rusk	14,703	90	3.1
St. Croix	61,951	277	2.2
Sauk	16,600	201	6.1
Sawyer	41,954	228	2.7
Shawano	115,569	369	1.6
Sheboygan	84,503	198	1.2
Taylor	20,681	99	2.4
Trempealeau	28,905	137	2.4
Vernon	29,849	102	1.7
Vilas	21,444	240	5.6
Walworth	102,485	334	1.6
Washburn	15,900	100	3.1
Washington	132,206	322	1.2
Waukesha	390,267	760	1.0
Waupaca	52,392	214	2.0
Waushara	24,531	102	2.1
Winnebago	167,245	426	1.3
Wood	74,669	232	1.6
Wisconsin	5,694,236	17,298	1.5

II. Access to Services

The purpose of the analysis in this report section is to examine available data on prevention and treatment service access issues. Areas that will be analyzed include geographic access issues, the penetration rate or “treated prevalence”, reasons people do not seek or obtain needed services, waiting lists and disparities among selected target populations. Comparisons with national data will be made where available.

Access to services can be defined in different ways with subtle variations. “Access” may refer to whether or not someone is enrolled into a service system to receive help for a mental health or substance abuse need. Many potential barriers lay in the path of someone accessing the help they need including:

- meeting eligibility requirements
- adequate financial resources
- insurance coverage policies
- personal motivation – self-awareness of one’s own needs
- availability of services in the geographic area
- capacity of the local service system

One or more of these barriers can prevent an individual from being officially enrolled into a service agency – the first step to receiving services. Even when an individual is enrolled into services, secondary problems with access to services may still occur such as staff availability (to be discussed later). However, usually the first issue in assessing access to services is how many individuals with needs actually were enrolled into services.

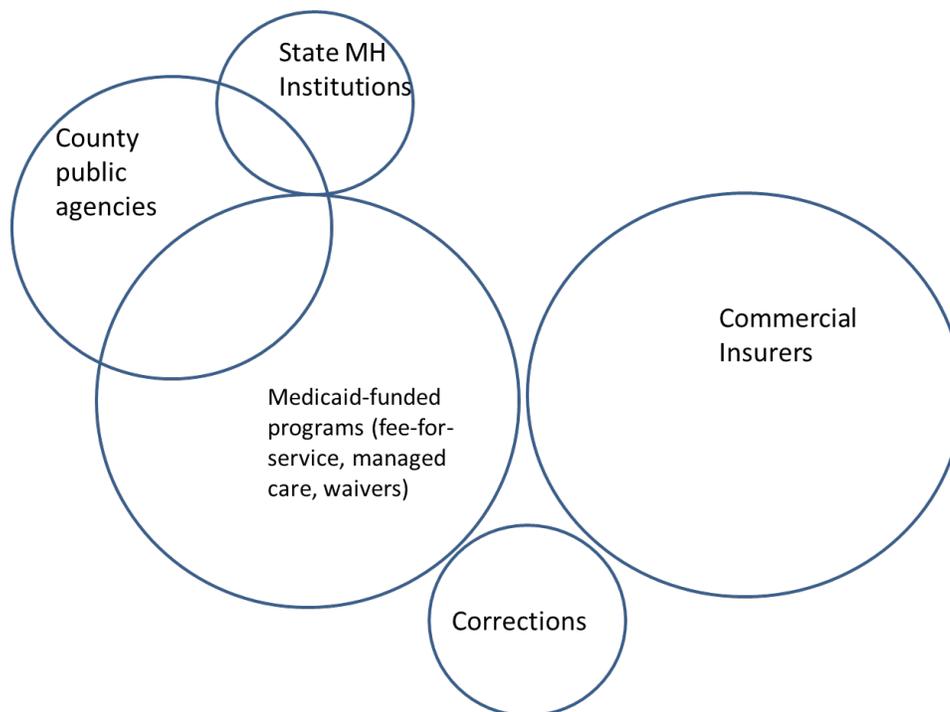
Number of Mental Health Consumers Served

The number of consumers served is sometimes referred to as “treated prevalence.” Treated prevalence can be defined as the percentage of individuals with needs who actually received mental health services. The untreated prevalence describes the gap between the population’s need (as described in the “Prevalence” section of this report) and whom the service system is currently treating.

The number served includes individuals served in both the public and private systems. Mental health consumers are treated through a variety of different programs and service systems. The diagram below illustrates a majority of those programs and service systems, including the Medicaid program and commercial insurance companies, which fund most of the mental health services provided in Wisconsin. Using data from all of these sectors, the following analysis attempts to count the total number of consumers receiving mental health services across the state. Consumers could possibly receive services from any combination of service sectors. However, the diagram simply illustrates which programs or service sectors are included in the following analysis and how consumers were unduplicated across sectors. Overlapping sectors represent service recipients that were unduplicated.

The public system is defined as both services provided by public agencies and services paid for with public funds. The primary providers of public services are Wisconsin’s 67 county-based mental health agencies who report all consumers served to the State Department of Health Services through the Human Services Reporting System (HSRS). In 2011, these agencies served 73,636 mental health consumers. Of these consumers, 87% were adults aged 18 and over.

Mental Health Programs and Service Sectors with Data on Consumers Served



Consumers with a SMI or SED made up 50% of those served in the public county system.

The state of Wisconsin provides public services through the Mendota and Winnebago Mental Health Institutes. The two institutes had 2,065 residents throughout 2011. Most of these (82%) are consumers already reported

by counties through the state HSRS data system. The counties and the two state institutes served a total of 74,008 mental health consumers in 2011. Of all the consumers served in these components of the public mental health system, 2.8% were a resident at a state institute at some point in 2011.

County mental health providers use county tax levy dollars to fund a portion of the services they deliver. State and federal tax dollars are also used to fund a portion of mental health services for public consumers. The largest source of federal funds for the provision of MH services is through the Medicaid program. Mental health consumers were identified in the Medicaid fee-for-service and managed care data based on having a primary diagnosis for mental health needs. The largest number of mental health Medicaid recipients are served through the managed care programs as described in the table below. While 111,081 consumers were served through the fee-for-service program, another 127,030 were served through the Medicaid managed care programs. Since a consumer's Medicaid status may change throughout the period of a year and program coverage policies have limitations, some consumers may use benefits through both programs to get the services they need. Of consumers in the managed care programs in 2011, 8.5% also received some fee-for-service benefits and they were unduplicated from the total for the analysis.

Two other smaller Medicaid managed care programs that are reported through different data systems include the Milwaukee Wraparound and the Dane County Children Come First (CCF) programs whom serve children with SED. These two programs served 1,409 children in 2011. The Children's SED waiver program is managed by the State Division of Long-Term Care and targets children with serious mental health needs who also have a developmental or physical disability. In 2011, 1,386 children were served through this mental health program.

After accounting for consumers who received services through multiple programs, a total of 220,737 consumers received mental health services through Medicaid programs in 2011 can be estimated. Because some Medicaid beneficiaries receive their services through the public mental health system, overlap with the consumers reported through this system needed to be eliminated also. Of those served in the county public mental health system in 2011, 34% used Medicaid as one of their payers and were thus unduplicated from the analysis. As a result, data reported from a majority of the public service sector, including people using public Medicaid funds, indicate a total of 257,999 consumers received mental health services in 2011.

Mental Health Consumers Served through Different Programs and Service Systems in 2011

Wisconsin Programs/ Agencies Providing Mental Health Services	2011 Adults Served	2011 Children Served	2011 Total Served
County Public System	64,104	9,532	73,636
Two State MH institutions	1,654	411	2,065
MA Fee-for-Service	84,073	27,008	111,081
MA Managed Care	79,655	47,377	127,030
MA Milwaukee Wraparound/ Dane CCF	0	1,409	1,409
MA Children's Long-Term Care SED Waiver	0	1,386	1,386
Unduplicated Subtotal	186,210	71,789	257,999
Corrections	10,400	522	10,922
Commercial Insurers ^a	219,501	38,313	257,814
Total Consumers Served (partially unduplicated)^b	416,111	110,624	526,735

^a Commercial insurance clients estimated based on 75% of data and includes some clients with developmental disabilities that could not be removed.

^b The total number of people served is unduplicated across the county system, institutions, and Medicaid-funded services. However, some duplication of clients served through other providers may exist.

The state correctional system also provides mental health services to some of its residents. Although it does not keep detailed records of the types and amounts of mental health services provided to clients, the Correctional system does track the number of clients receiving psychiatric evaluations, medication, or therapy. In the adult correctional facilities across the state, State Corrections officials reported approximately 7,800 clients received mental health services at any one point throughout 2012. Officials estimated an annual turnover rate in their mental health caseload of one-third which was used to calculate an estimated 10,400 adults receiving mental health services in the correctional system annually. In the two juvenile correctional facilities in Wisconsin, officials were able to identify the exact total number of youth receiving a psychiatric evaluation and/or mental health therapy in the 12 months prior to November 29, 2012. Of the 662 males and 72 females residing in these two facilities during this period, 450 males and all 72 females received one of these mental health services.

The private system is defined as mental health services provided by private agencies through the use of private funds primarily from individuals and insurance plans. While insurance companies keep detailed records of services provided to clients subscribed to their coverage plans, calculating a statewide total of service recipients has been difficult historically due to the decentralized storage of these records across multiple insurance companies. However, the Wisconsin Health Information Organization (WHIO), formed in 2007, has built a collaboration of health care agencies, including commercial insurance companies, aimed at addressing this information gap. WHIO has collected agreements from public and private health care providers and funders willing to contribute their client data to a central database. WHIO manages the centralized database which includes data on an estimated 68% of Wisconsin's population as of December 2012, including Medicaid recipients reported through the Department of Health Services (DHS).

WHIO's data helps estimate the elusive number of people accessing mental health services through different commercial insurance plans across the state. Current available data includes an estimated 75% of all

commercially insured clients in Wisconsin. Based on WHIO's existing database, an estimated 257,814 consumers accessed mental health services in 2011 through the following commercial insurance plans:

- The Alliance
- Anthem BCBS
- DeanCare
- GHC – South Central Wisconsin
- Gundersen Lutheran Health Plan
- Health Tradition Health Plan
- Humana
- MercyCare
- Network Health Plan
- Physicians Plus
- Security Health Plan
- United HealthCare
- Unity
- WPS
- WEA

Although the data may only represent 75% of clients receiving mental health services through commercial insurance in 2011, the numbers also include clients with developmental disabilities that could not be removed for this analysis. Some commercial insurance clients may also switch to Medicaid insurance or be served in the county public system within a year, but such clients could not be unduplicated for this analysis. Other groups of clients not included are consumers served through other sectors such as Child Welfare and Long-Term Care programs like Family Care. However, many of the Child Welfare clients would be expected to be referred and treated in programs already included in this analysis and the number of Family Care clients would be small relative to the other groups of clients reported. A final caveat is that no information on people who self-pay was included.

Mental Health Treatment Gaps

In the Prevalence section of this report, 1,037,297 people in Wisconsin were estimated to have any type of mental illness (AMI) in 2011: 833,256 adults and 204,041 children. Based on the above statistics, 526,735 people in Wisconsin were estimated to have received some type of mental health treatment in 2011: 416,111 adults and 110,624 children. The difference is the estimated number of people with mental health needs who did not access treatment in Wisconsin, or the estimated “treatment gap.” Estimates indicate that 49% (510,562) of people with any mental illness in Wisconsin in 2011 did not access treatment. Among adults, 50% (417,145) did not access treatment. Among children, 46% (93,417) did not access treatment.

A 2007 national estimate based on survey data from the National Survey on Drug Use and Health (NSDUH) found 55% of adults who experienced serious psychological distress (SPD) did not receive mental health services in the past year⁵². A 2009 NSDUH estimate indicated a high proportion of adults with AMI (62%) or SMI (40%) did not receive any mental health services⁵³. Based on these estimates, Wisconsin's mental health treatment gap is narrower than the national average.

Number of Substance Abuse Consumers Served and Gaps

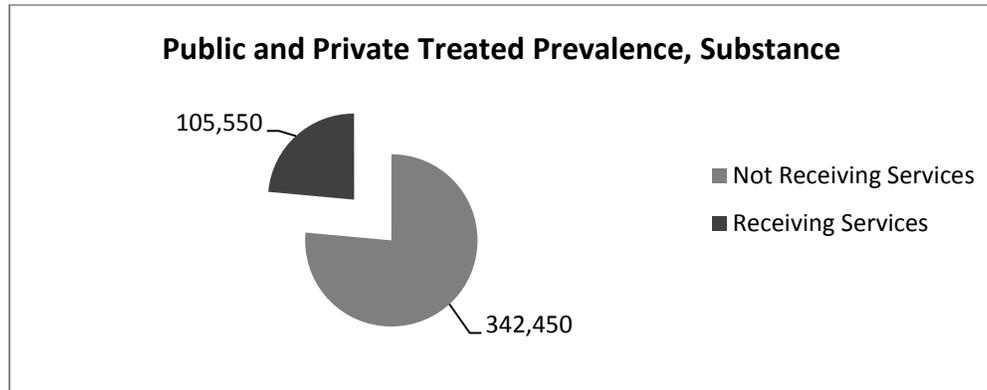
The 2010 National Survey of Substance Abuse Treatment Services – Wisconsin sample, found that there were 306 persons in treatment on any given day per 100,000 population or a total of 17,385 persons.⁵⁴ The national average across states is 381 persons in treatment per 100,000 population indicating that Wisconsin's rate of treatment is 20% below the national average in this study.

The 2010 National Survey on Drug Use and Health – Wisconsin sample, provides an estimate of the rate and number of persons needing but not receiving substance abuse treatment.⁹ According to the survey, 448,000 youth and adults needed treatment in Wisconsin that year but only 8% or 36,000 persons received treatment. For youth, the percentage receiving treatment is 3% or 1,100 persons. Since these data are considered low-end estimates, it will be necessary to conduct further analyses (described below) to arrive at a more accurate annual treated prevalence.

An analysis of Wisconsin Human Services Reporting System (HSRS; county-authorized and subsidized treatment), standard Medicaid and private insurance data will provide the best picture of the treated prevalence in Wisconsin. The analysis is presented in the table that follows.

	HSRS	Medicaid	Overlap of clients between HSRS and Medicaid	Total Number of Persons Served with Public Support
Unduplicated Count of Persons Receiving Substance Abuse Services, 2010	48,100	11,800	5% or 2,900 persons	57,000

It should be noted that substance abuse service data from private insurers is not included in the above table and so the 57,000 persons served in a year is incomplete. Based upon survey data showing that about 46% of persons receiving services have private health insurance or self-pay⁹, the total number of persons receiving treatment in Wisconsin in 2010 could approach 105,550. This 105,550 figure is corroborated by data obtained from an analyst at The Alliance, Fitchburg, WI. The analyst used 2011 data from one of Wisconsin’s largest health information exchanges owned by the Wisconsin Health Information Organization (WHIO). WHIO’s database covers over 85% of Wisconsin’s private-insured residents. The analyst identified 36,050 persons receiving substance abuse treatment paid for with private insurance. Adjusting for the 85% coverage rate, a revised estimate of treated prevalence would be very close at 99,410. The total number of persons receiving substance abuse services each year is estimated to be between 99,410 and 105,550. Using the upper end figure of 105,550 persons receiving treatment each year, Wisconsin’s treated penetration rate would be estimated at 105,550/448,000 or 23% (see chart below).



Each year the Division of Mental Health and Substance Abuse Services gathers data from county agencies administering or providing substance abuse services.⁵⁵ Data on waiting lists and unavailable services are collected. In 2010, 395 persons statewide were denied a needed service such as residential, intensive outpatient counseling or narcotic treatment due to lack of availability or lack of public funding. An additional 2,460 persons statewide were placed on a waiting list for services such as residential, intensive outpatient counseling, regular outpatient counseling or narcotic treatment where they were required to wait two to three weeks before receiving services. Studies show that clients from waiting lists are at higher risk of not starting treatment or withdrawing from treatment.^{56,57} Thirty-five county agencies identified services that were needed but not available. Eighteen counties indicated that residential or housing services were insufficient; 14 counties identified insufficient clinical staff for outpatient counseling; and 6 identified insufficient narcotic treatment services.

Geographic Disparities in Access to Mental Health Treatment

Examining disparities in access to treatment by county is a logical place to start since Wisconsin is a county-based service system. However, the calculation of treated prevalence for the state did not include county-level data. Although county-level treated prevalence data may be available for most of the sectors identified, obtaining permissions and agreements from other agencies for county-level data was not possible for this report. However, county-level data is readily available describing publicly funded consumers – consumers using Medicaid and consumers served through the county public mental health system. While all providers are bound by state statutes and administrative rules, most of the State DHS’s influence is over the publicly funded consumers via policies, grant funding, and training and technical assistance. Thus, examining the treated prevalence by county for only publicly funded consumers may highlight which counties are most likely to be influenced by government system improvement efforts and which counties may under-utilize public mental health funding opportunities.

For each county in 2011, the table below displays the estimated number of adults and youth with any mental illness, the unduplicated number of mental health consumers served using Medicaid or the county public system, and the percentage served.

Utilization of the Publicly Funded Mental Health Services by County in 2011

County	Estimated Number of Adults w/AMI (19.0%)	# of Adults Served with Public Funds	% of Adults w/AMI Served with Public Funds	Estimated Number of Youth w/AMI (21.0%)	# of Youth Served with Public Funds	% of Youth w/AMI Served with Public Funds
Adams	3,300	1,213	36.8%	532	486	91.4%
Ashland	2,362	1,326	56.1%	567	425	74.9%
Barron	6,810	2,439	35.8%	1,542	752	48.8%
Bayfield	2,328	614	26.4%	455	320	70.4%
Brown	35,980	10,491	29.2%	9,399	3,456	36.8%
Buffalo	2,015	374	18.6%	460	151	32.8%
Burnett	2,377	769	32.4%	469	308	65.7%
Calumet	6,905	1,220	17.7%	2,061	560	27.2%
Chippewa	9,157	2,619	28.6%	2,224	1,135	51.0%
Clark	4,687	1,593	34.0%	1,520	532	35.0%
Columbia	8,335	1,836	22.0%	2,048	710	34.7%
Crawford	2,478	1,002	40.4%	579	342	59.0%
Dane	74,123	13,771	18.6%	15,918	4,988	31.3%
Dodge	13,191	3,228	24.5%	3,021	1,273	42.1%
Door	4,338	1,110	25.6%	783	388	49.5%
Douglas	6,596	2,360	35.8%	1,430	730	51.1%
Dunn	6,674	1,923	28.8%	1,373	594	43.3%
Eau Claire	15,062	4,212	28.0%	3,121	1,545	49.5%
Florence	700	205	29.3%	122	58	47.5%
Fond du Lac	15,037	4,953	32.9%	3,554	1,679	47.2%
Forest	1,374	615	44.8%	319	289	90.5%
Grant	7,700	2,050	26.6%	1,633	689	42.2%
Green	5,337	1,467	27.5%	1,374	521	37.9%
Green Lake	2,807	801	28.5%	680	274	40.3%
Iowa	3,396	1,022	30.1%	877	341	38.9%
Iron	935	425	45.5%	158	169	*107.0%
Jackson	3,027	791	26.1%	706	326	46.2%

County	Estimated Number of Adults w/AMI (19.0%)	# of Adults Served with Public Funds	% of Adults w/AMI Served with Public Funds	Estimated Number of Youth w/AMI (21.0%)	# of Youth Served with Public Funds	% of Youth w/AMI Served with Public Funds
Jefferson	12,203	3,394	27.8%	3,071	1,180	38.4%
Juneau	4,009	1,524	38.0%	873	524	60.0%
Kenosha	23,730	6,955	29.3%	6,632	2,572	38.8%
Kewaunee	3,011	662	22.0%	757	267	35.3%
La Crosse	17,357	5,431	31.3%	3,665	1,821	49.7%
Lafayette	2,386	645	27.0%	659	278	42.2%
Langlade	2,987	1,385	46.4%	643	542	84.3%
Lincoln	4,262	1,616	37.9%	988	586	59.3%
Manitowoc	12,014	2,678	22.3%	2,801	1,085	38.7%
Marathon	19,360	5,989	30.9%	5,008	2,221	44.3%
Marinette	6,345	2,402	37.9%	1,324	1,033	78.0%
Marquette	2,350	756	32.2%	486	244	50.2%
Menominee	551	359	65.1%	206	187	91.0%
Milwaukee	135,895	47,013	34.6%	34,969	17,673	50.5%
Monroe	6,352	1,866	29.4%	1,764	828	46.9%
Oconto	5,556	1,521	27.4%	1,297	599	46.2%
Oneida	5,578	2,419	43.4%	1,008	869	86.2%
Outagamie	25,463	6,724	26.4%	6,800	2,466	36.3%
Ozaukee	12,677	1,584	12.5%	3,241	464	14.3%
Pepin	1,086	221	20.4%	259	92	35.5%
Pierce	6,073	1,068	17.6%	1,380	365	26.5%
Polk	6,424	2,129	33.1%	1,600	809	50.6%
Portage	10,600	2,618	24.7%	2,192	885	40.4%
Price	2,163	815	37.7%	426	221	51.8%
Racine	28,017	6,860	24.5%	7,414	2,935	39.6%
Richland	2,629	1,251	47.6%	632	372	58.8%
Rock	22,955	7,077	30.8%	6,110	2,920	47.8%
Rusk	2,166	850	39.2%	506	300	59.3%
St. Croix	11,805	2,842	24.1%	3,537	1,132	32.0%
Sauk	9,038	2,812	31.1%	2,270	1,011	44.5%
Sawyer	2,504	920	36.7%	517	306	59.2%
Shawano	6,176	2,189	35.4%	1,463	888	60.7%
Sheboygan	16,727	4,084	24.4%	4,230	1,253	29.6%
Taylor	2,974	884	29.7%	768	328	42.7%
Trempealeau	4,189	1,145	27.3%	1,057	350	33.1%
Vernon	4,206	1,074	25.5%	1,199	327	27.3%
Vilas	3,367	1,158	34.4%	581	439	75.6%
Walworth	15,075	4,450	29.5%	3,690	1,464	39.7%
Washburn	2,424	869	35.8%	488	299	61.3%
Washington	19,113	4,669	24.4%	5,034	1,723	34.2%
Waukesha	56,794	7,966	14.0%	14,940	2,906	19.5%
Waupaca	7,793	2,395	30.7%	1,836	813	44.3%
Waushara	3,758	1,066	28.4%	761	565	74.2%
Winnebago	25,054	7,383	29.5%	5,459	2,452	44.9%
Wood	11,026	4,098	37.2%	2,573	1,638	63.7%
State Total	833,256	232,245	27.9%	204,041	85,273	41.8%

* The artificially high rate for youth in Iron County is possibly due to the national AMI rate of 21% not being appropriate for Iron County and/or the number of children served being over-reported.

Overall, a higher percentage of youth consumers (42%) receive publicly funded treatment than adults (28%). Given that a higher percentage of youth than adults are in poverty and public systems serve a large majority of low-income individuals, this result may be expected. The other difference between adult and youth public treatment rates is the variability among counties. The range of public treatment rates for adults ranges from 12-65% while the youth treatment rates range from 14-100%. Thus, while the public treatment rates may be higher for youth on average, there are a subset of counties with relatively low treatment rates that could be examined further to determine why they are under-utilizing publicly funded treatment.

Counties with the highest youth public treatment rates over 80% were Adams, Forest, Iron, Langlade, Menominee, and Oneida. Waukesha and Ozaukee had the lowest youth public treatment rates. Counties with the highest adult public treatment rates over 50% included Ashland and Menominee. Counties adult public treatment rates under 20% included Buffalo, Calumet, Dane, Ozaukee, Pierce, and Waukesha.

Since public county and Medicaid recipients only are examined here, low treatment rates does not necessarily mean that a county has low treatment rates overall. Counties with higher average incomes are likely to have more individuals using private insurance and fewer using publicly funded treatment. Waukesha and Ozaukee, who have low public treatment rates, also have the two highest per capita incomes in the state⁵⁸ and likely have a larger proportion of adults who use private insurance as a result. The opposite may be true for counties with lower than average per capita incomes. Future analyses will attempt to include county-specific data from the commercial insurers to obtain overall treatment rates.

Demographic and Other Disparities in Access to Mental Health Treatment

Do various population groups have service access issues? Data on the proportion of services received by population groups can shed light on whether or not they are underserved. Young adults aged 18 to 25 with mental health symptoms were less likely than their older counterparts to have received mental health services (29.4% vs. 47.2% among those aged 26 to 49 and 53.8% among those aged 50 or older)⁵². In addition, females were more likely to have received services than males (49.2 vs. 36.7%), and whites were more likely than Hispanics and blacks to have received mental health services (50.9 vs. 29.6 and 26.0%, respectively).

According to Wisconsin's prevalence estimates, the highest rate of any mental illness (AMI) among racial groups was 21.6% of Native Americans in 2010. Out of 54,526 adults in the state based on the 2010 U.S. Census, this means that 11,778 Native Americans have a mental health need compared to the 1,462 Native Americans who were served through the public mental health system in CY 2010 according to the state's Human Services Reporting System (HSRS). Based on the estimated prevalence of 11,778 Native Americans with a mental health need in Wisconsin within a year, the public county mental health system served 12.4 percent.

The Department of Justice's Survey of Inmates in State and Federal Correctional Facilities (2004) and Survey of Inmates in Local Jails (2002) also indicate that fewer than half of inmates who have a mental health problem have ever received treatment for their problem⁵⁹. A third or fewer received mental health treatment after admission. These rates differ depending upon the type of correctional facility.

Disparities in Substance Abuse Treatment

Data on the proportion of services received by population groups can shed light on whether or not certain population groups have access to services or are underserved. As previously reported, White males, living in urban areas and having an alcohol use disorder make up a large percentage of persons receiving substance abuse services. The table that follows describes the relative distribution of services to selected population groups

compared to their substance abuse prevalence. National Survey on Drug Use and Health⁹ (NSDUH) and Human Services Reporting System (HSRS) data are analyzed. Females, youth, persons age 65 and over, and Hispanic persons are underserved in proportion to their substance abuse prevalence.

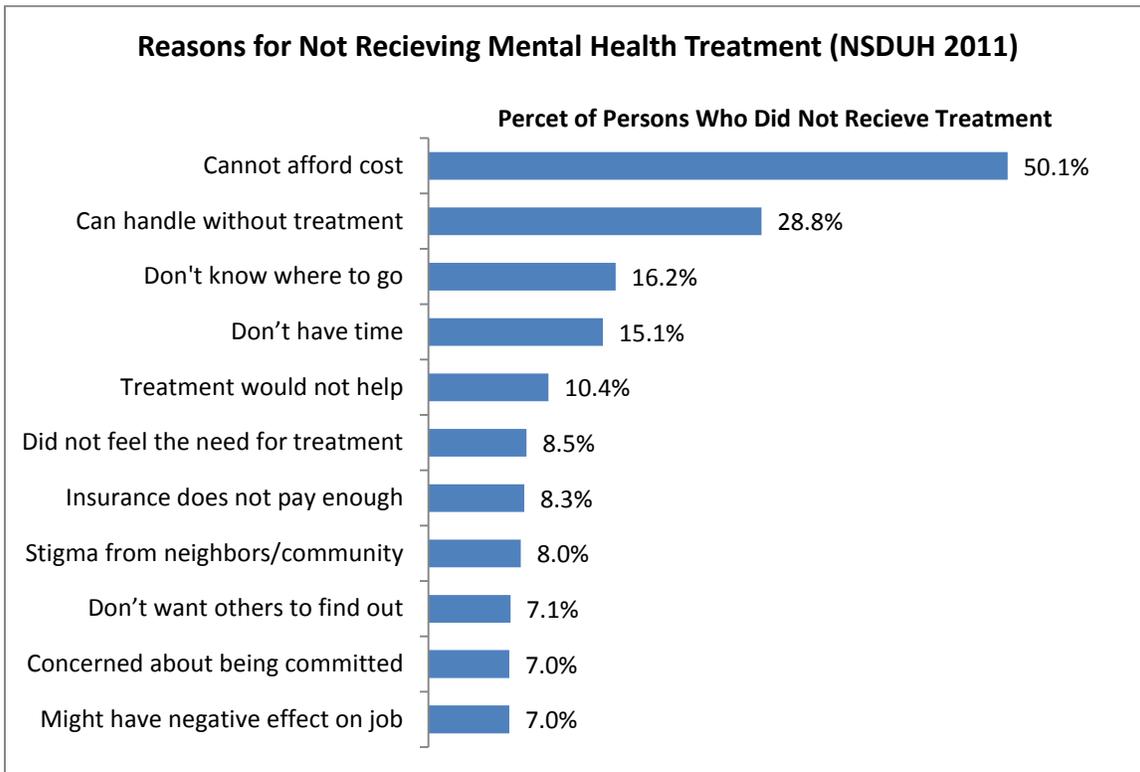
	Percent of Substance Abuse Prevalence, 2009-2010 Combined, NSDUH		Percent of Substance Abuse Clients Served, 2010, HSRS	
	#	%	#	%
Female	149,674	33.4%	15,635	28%
Age under 18	39,986	8.9%	1,117	2%
Age 65 and over	13,214	2.9%	1,005	1.8%
White	387,896	86.6%	45,789	82%
Black	25,282	5.6%	5,584	10%
Hispanic	25,079	5.6%	2,234	4%
Native American	6,075	1.4%	1,675	3%
Asian	3,668	0.8%	558	1%
Total	448,000		55,840	

Opiates

As noted earlier in the needs assessment, the minimum annual prevalence of Wisconsin adults needing treatment for heroin or other opiate addiction is estimated to be 30,450 persons. Human Services Reporting System (HSRS; county-authorized services) data indicate that 5,848 persons received treatment for opiate abuse or dependence in 2010. While the HSRS data does not include services authorized under Medicaid or private insurance, there is an indication that opiate abusers are underserved.

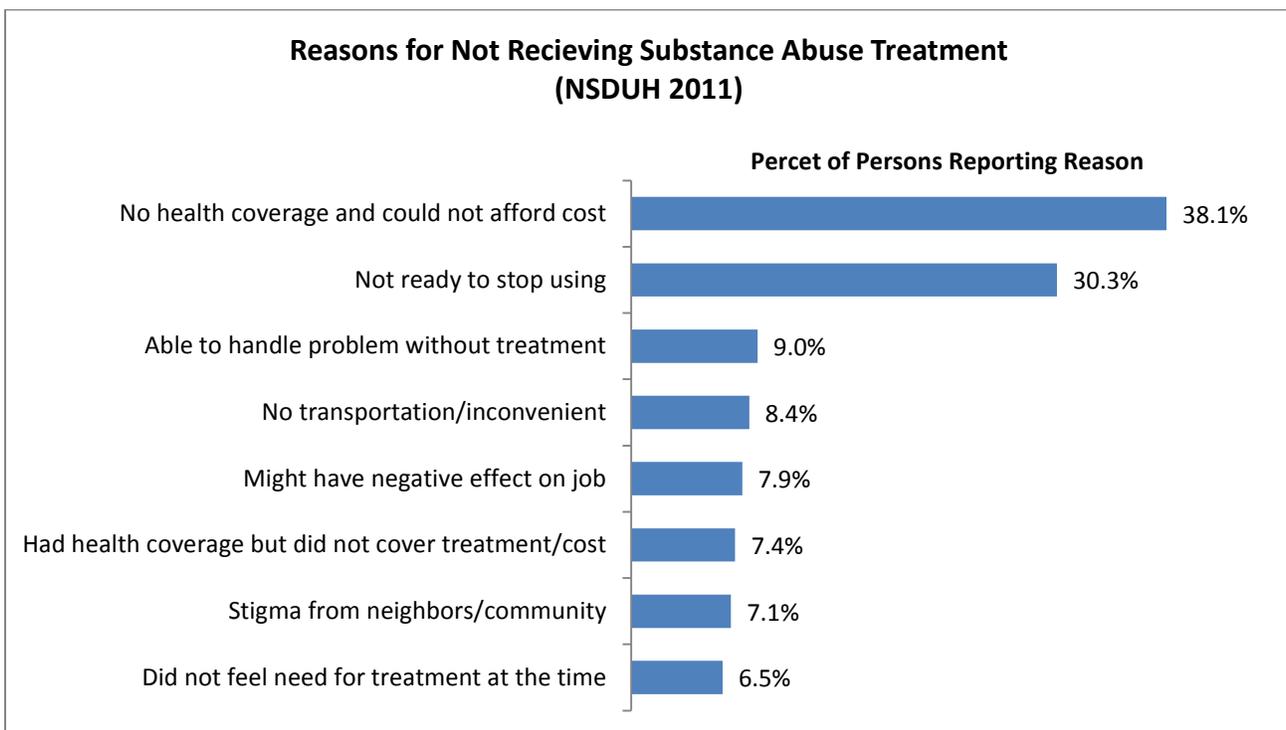
Barriers to Accessing Mental Health Treatment – the Consumer Perspective

The NSDUH survey asks a nationally representative sample of people annually about whether they had a mental health need, if they received treatment, and if they experienced barriers to accessing treatment. In 2011, respondents who had an unmet mental health need for treatment cited the top 10 reasons in the chart below for why they did not access treatment⁶⁰ (multiple answers could be given). Far and above any other reason for not receiving treatment, cost was cited as the number one reason by half of respondents. Just under 30% of people indicated they could handle their problems without treatment and another 8.5% felt they didn't need treatment at all. The third and fourth ranked reasons were that people didn't know where to go or didn't have time for treatment. About 7-8% of persons indicated at least one of three reasons related to stigma, including the risk of feeling stigma in the community, among others/friends, or at work.



Substance Abuse Treatment – the Consumer Perspective

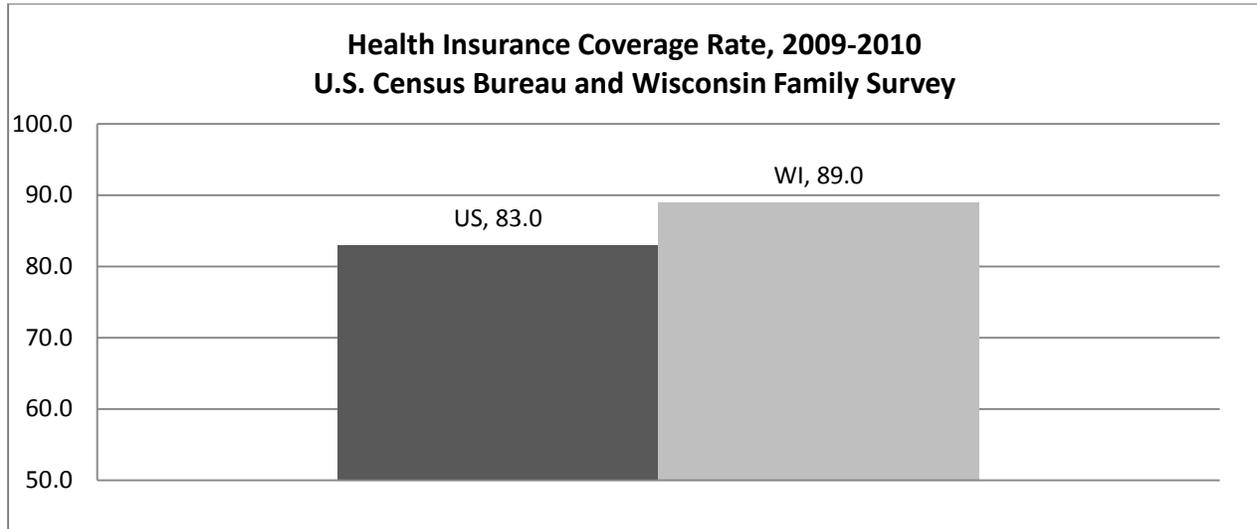
Another important perspective on the service access issue is from the potential consumer or client viewpoint. This information can be used to assess the reasons persons don't receive substance abuse treatment. There are recent U.S. data available from the National Survey on Drug Use and Health that describe the most frequent reasons given⁹ (see the graph below).



Persons' perceptions that they do not have a serious enough problem or just don't want help top the list of reasons for not receiving substance abuse treatment at 45.8% (combines 30.3% + 9.0% + 6.5%). No or inadequate health insurance is the close second most frequent reason cited at 45.5% and stigma (15%) is third.

According to the U.S. Census Bureau, Wisconsin, at 89%, is among the top three states in the Country for the percent of the population having health insurance.^{61,62} The national average is 83% (see the chart below). While this is generally a good thing for people having physical health issues or medical conditions, according to the National Survey on Drug Use and Health only about 61% of persons with substance use disorders have public or private health insurance. Only about 76% of persons with any mental illness (AMI) have public or private health insurance and just 57% of persons with serious mental illness (SMI) have health insurance. This low rate of health insurance creates a barrier to receiving treatment. Protecting or increasing public funding and affordable insurance has been identified by stakeholders as priority needs.

The Wisconsin Division of Public Health conducts its own annual Family Health Survey data from a representative sample of Wisconsin residents. Combined 2008-2010 results confirm that 89% have insurance the entire year⁶³. Another 5% have insurance for part of the year and 6% are uninsured all year. The counties with the highest rate of uninsured persons were Clark (21%), Vilas (16%), Oconto (12%), and Vernon (12%).



Stigma has been identified by stakeholders as a priority. Stigma is when someone negatively judges you based on a personal trait or condition. Unfortunately this is a common experience for people who have a mental health or substance use condition. Stigma may be obvious and direct, such as someone making a negative remark about your mental illness or your treatment. Or it may be subtle, such as an individual or organization assuming you could be unstable, violent or dangerous because you have a certain condition. Some of the harmful effects of stigma include:

- Discrimination in employment, education or housing
- Bullying, physical violence or harassment
- Health insurance that doesn't adequately cover your mental illness care needs
- The belief that you will never be able to succeed at certain things or that you can't improve your situation
- Withdrawing from society and isolation

According to the National Survey on Drug Use and Health, 15% of potential substance abuse treatment consumers and 22% of potential mental health service consumers identify stigma as the reason they do not seek or receive treatment.

Mental Health Promotion/Prevention Considerations

Mental health promotion and prevention consists of implementing evidence-based and best-practice interventions to address high priority needs, such as those identified in this needs assessment. The key to mental illness prevention lies in early intervention, with a particular focus on childhood development. This is supported by the dramatic findings from the Adverse Childhood Experiences (ACE) study¹¹⁵ led by Drs. Anda and Felitti in collaboration with Kaiser Permanente and the Centers for Disease Control and Prevention. Adverse childhood experiences includes but is not limited to being abused, having divorced parents, or living in a household with anyone who had a mental illness or substance use disorder. The ACE study identified correlations between ACEs and poor outcomes across a wide range of measures of adult health and well-being. Adults who reported more ACEs also reported increased mental health problems, substance use, and suicide attempts, as well as certain chronic diseases.

Wisconsin-specific ACE data has been collected and analyzed, resulting in a document entitled, Adverse Childhood Experiences in Wisconsin: Findings from the 2010 Behavioral Risk Factor Survey¹¹⁶. Many of the original ACE correlations were confirmed within the Wisconsin cohort, including the finding that Wisconsinites with higher ACE scores were more likely than people with no ACEs to have been diagnosed with anxiety or depression at some point in their life. Additionally, 56% of Wisconsin adults were found to have experienced at least one ACE and 14% were found to have experienced four or more. With the awareness of the devastating impact of ACEs, there is a focus on finding resources that will prevent, reduce, or change the life course predicted by high ACE scores. As such, resilience research is on the rise, providing direction for individuals, families, communities, organizations, and systems of care. With this knowledge, Wisconsin is looking to a population-based approach to prevent exposure to and increase protection from the negative long-term impact of ACEs.

One way to prevent the negative long-term impact of ACEs on the mental health of Wisconsin citizens is early identification of those who have experienced ACEs coupled with proven interventions to build resilience. To that end, a broad-based Wisconsin coalition has plans to develop an ACE & Resilience Screener and Resilience Tool Kit, as well as convene a Learning Institute where stakeholders and national technical assistance advisors currently working in Wisconsin will gain concrete tools to integrate ACE and Resilience knowledge into practice within child-serving systems.

For mental health promotion, one vital initiative is in the area of Infant Mental Health, where the focus is on promoting the healthy social and emotional development of the youngest Wisconsin children. One goal is to provide parents and people working with young children and their families (e.g., child care workers, home visitors, and pediatricians) the knowledge, skills, and practices that support healthy social and emotional development. These mental health promotion activities are supported by research, such as that done by the Center for the Developing Child at Harvard University, showing that early influences – both positive and negative – have a critical impact on the development of children’s brains and their lifelong health, including mental health.

Substance Abuse Prevention Considerations

The Federal Substance Abuse and Mental Health Services Administration endorses the Institute of Medicine’s (IOM) prevention strategy types. While all of the IOM’s prevention strategies are helpful in abating community

substance abuse problems, the Wisconsin Division of Mental Health and Substance Abuse Services has determined that the universal indirect prevention strategies produce the most widespread and lasting positive impact on community substance abuse problems. Universal indirect prevention strategies address the entire population with approaches aimed at preventing or delaying the abuse of alcohol, tobacco, and other drugs. In universal indirect prevention the entire population is considered: 1) part of the solution; 2) at-risk for substance abuse; and 3) capable of benefiting from prevention strategies. Included are “environmental” strategies which establish or change written and unwritten school and community alcohol/drug use standards, codes, laws, mores, attitudes and culture. On-going community-at-large events such as fairs, school assemblies, or the widespread dissemination of information and messages are also considered universal indirect prevention strategies.^{64,65}

Access to universal indirect prevention strategies has been identified as a priority by stakeholders, the State Council on Alcohol and Other Drug Abuse, the Wisconsin State Health Plan, and the Division of Mental Health and Substance Abuse Services. What is the availability of universal indirect prevention strategies across Wisconsin’s counties? An analysis of 2011 Substance Abuse Prevention Services Information System (SAPSIS) data show that 9 of Wisconsin’s 11 tribal nations and 30 of Wisconsin’s 72 (42%) counties did not report universal indirect prevention strategy activities indicating a probable lack of access to these effective services.⁶⁶

III. Service and Workforce Capacity

The purpose of the data analysis in this report section is to examine data on the availability and capacity of prevention strategies and treatment services. Areas that will be analyzed include service utilization and workforce capacity to demonstrate to what degree the MH/SA service systems can meet the needs of consumers. Ideally, the number of workforce FTE's compared to the number of persons with MH/SA needs would be used to demonstrate whether the service systems had adequate capacity, but statewide workforce FTE data is not always available. When absent, service utilization data will be used instead to demonstrate the volume and array of services available to treat persons with MH/SA needs. Comparisons with national data and analysis of disparities among selected population groups will be made where data is available.

Substance Abuse Prevention

An analysis of state or federal prevention grant funds (such as Brighter Futures, Special Incentive Grant, Alliance for Wisconsin Youth, Drug-Free Communities, etc.) going to counties revealed that 22 of Wisconsin's 72 counties (Barron, Bayfield, Buffalo, Burnett, Clark, Door, Florence, Green, Green Lake, Juneau, Kewaunee, Lafayette, Langlade, Marinette, Oconto, Pepin, Price, Richland, Rusk, Sauk, Shawano and Taylor) did not receive any special prevention grant funds beyond the 20% set-aside funds provided under the Federal substance abuse block grant.⁶⁷ The 20% prevention set-aside funds going to counties average \$8,000 per county. These 22 counties represent over 600,000 Wisconsin residents. Furthermore, a list of active, grassroots youth prevention coalitions within counties maintained by the Alliance for Wisconsin Youth further indicates that 3 of these 22 counties (Juneau, Lafayette and Sauk) do not have a grassroots youth prevention coalition.

Substance Abuse Treatment

An effective and appropriate array and utilization of treatment services will ensure appropriate access and achieve efficiencies in the use of limited public funds and resources. As such it is important to assess whether treatment services over- or under-utilized.

In 2010, Wisconsin Human Services Reporting System data showed that 55,840 persons came in contact with the publically supported substance abuse services system:

General Service Category	# of Persons	% of Persons
Detox	7,023	12.6%
Various Inpatient, Residential and Outpatient Levels of Care	24,899	44.6%
Brief Evaluation, Case Management or Ancillary Services	23,918	42.8%

In general, for substance abuse services, females receive outpatient at a slightly higher rate than males and males receive detox at a higher rate than females. Older adults (age 55 and older) receive outpatient at a lower rate than middle aged and young adults but older adults receive detox at a higher rate. Youth age 17 and under use detox much less than adults but youth use day treatment more than adults. No differences in specific substance abuse service levels of care were found for racial/ethnic groups. Wisconsin counties (excluding Milwaukee) with urban areas utilize less inpatient, day treatment, case management, and medically managed detox than rural counties, but urban counties utilize more residential and medically monitored detox.

The approach used in the analysis and tables that follow integrates treatment utilization data and estimation approaches to produce an approximation of the gaps in treatment services. The analysis is derived from consumer-level service data from states identified as having relatively lower utilization of high-end detox and inpatient services. In addition, Wisconsin's Human Services Reporting System (HSRS or county-authorized services) and Wisconsin's Medicaid Management Information System data are analyzed.⁶⁸ There are some limitations to this analysis that should be noted. Large data systems can have sources of sampling, coding and reporting variability and error. In addition, much of the information in this analysis relies on national, selected states or Wisconsin statewide data that when applied to Wisconsin or its counties should be interpreted with caution

The following table presents composite state and national substance abuse service distribution data available from Wisconsin's Medicaid Management Information System (MA), Wisconsin's HSRS, and the Federal

Treatment Episode Data Set (TEDS). All states report into TEDS and Wisconsin uses its HSRS data to populate the Federal TEDS database. The column at the far right is a composite average of the level of care data and is the recommended benchmark. As an example, out of 100 people seeking substance abuse treatment, 1 will need inpatient, 2 will need hospital detox, 7 will need residential detox, 1 will need ambulatory detox, 7 will need primary residential treatment, 7 will need transitional residential treatment, 12 will need day treatment or intensive outpatient, 62 will need regular outpatient, etc.

Service/Benefit	Wisconsin MA, 2008	Wisconsin HSRS, 2008	Five States Examined in the County Infrastructure Study TEDS, 2008	States with Low Inpatient and Detox Usage TEDS, 2008*	Composite Average (omits MA data)
Inpatient	6.7%	.3%	1.6%	.4%	.8%
Detox – medically managed		4.7%	.2%	.9%	1.9%
Detox – medically monitored or residential	NA	10.2%	6.5%	4.8%	7.2%
Ambulatory detox	Included in outpatient	<.1%	.5%	1.6%	.7%
Residential primary, short term	NA	5.9%	6.7%	9.5%	7.3%
Residential transitional, long term	NA	4.1%	7.4%	8.4%	6.6%
Day treatment**	1.4%	3.2%	14.7%	19.0%	12.3%
Community Support Program	<.1%	<.1%	NA	NA	<.1%
Comprehensive Community Services	<.1%	<.1%	NA	NA	<.1%
Outpatient (includes case management)	91.9%	69.2%	62.4%	55.4%	62.1%
Vocational	NA	.3%	NA	NA	.2%
Supportive housing	NA	.4%	NA	NA	.2%
Child care	NA	.1%	NA	NA	.2%
Transportation	NA	.3%	NA	NA	.2%
Crisis intervention	NA	.4%	NA	NA	.2%

*Alabama, Arizona, California, Florida, Hawaii, Idaho, Indiana, Iowa, Louisiana, Maine, Maryland, Minnesota, Mississippi, New Mexico, North Dakota, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Virginia, Washington, West Virginia, Wyoming

**There was difficulty distinguishing between day treatment and intensive outpatient in the various data sets.

The table on the next two pages presents actual county level of service data reported in the Human Services Reporting System. This analysis enables policy makers and other stakeholders a means of comparing each county's actual service array to the recommended benchmark service array. In general, Wisconsin's publicly supported substance abuse services system over-utilizes detox services and under-utilizes primary residential and day treatment/intensive outpatient levels of care.

WISCONSIN COUNTY MENTAL HEALTH AND SUBSTANCE ABUSE INFRASTRUCTURE INITIATIVE

Substance Abuse: 2008 Service/Benefit Base Estimates and Admissions Distribution - Gap

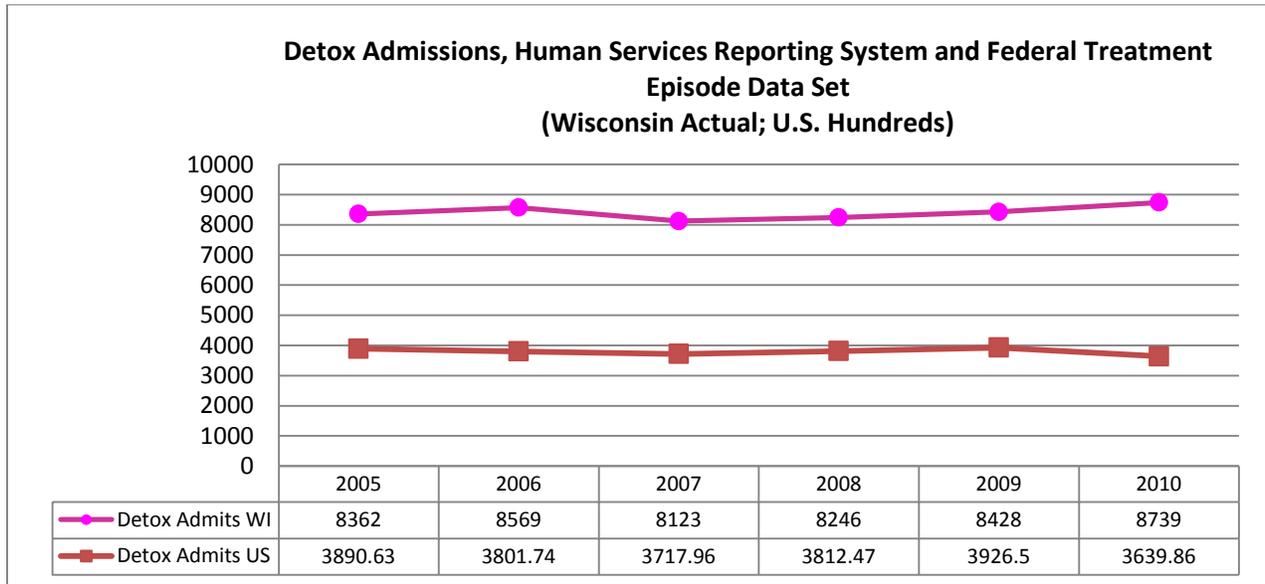
	Inpatient	Medically Managed Detox	Other Residential Detox	Ambulatory Detox	Short-term Residential	Long-term Residential	Day Treatment	Community Support Program	Comprehensive Community Services*	Out-patient	Vocational	Supportive Housing	Child Care*	Transportation	Crisis Intervention
Service Base Estimates	0.8%	1.9%	7.2%	0.7%	7.3%	6.6%	12.3%	<.1%	<.1%	62.1%	0.2%	0.2%	0.2%	0.2%	0.2%
Adams	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	CCS	97.9%	0.0%	0.0%		0.0%	0.0%
Ashland	14.0%	5.4%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%		76.0%	0.0%	1.6%		1.6%	0.0%
Barron	0.3%	6.5%	0.0%	0.0%	13.0%	7.2%	0.0%	0.0%		62.1%	0.0%	1.4%		3.1%	6.5%
Bayfield	0.8%	19.7%	0.0%	0.0%	6.3%	0.8%	1.6%	0.0%		69.3%	0.0%	0.8%		0.0%	0.8%
Brown	0.0%	41.8%	0.2%	0.0%	12.7%	4.0%	0.0%	0.0%	CCS	32.2%	1.0%	3.4%		4.1%	0.0%
Buffalo	8.0%	12.0%	0.0%	0.0%	20.0%	20.0%	4.0%	0.0%		32.0%	4.0%	0.0%		0.0%	0.0%
Burnett	0.0%	3.8%	0.0%	0.0%	5.7%	4.7%	0.0%	0.0%		84.0%	0.0%	0.9%		0.0%	0.9%
Calumet	0.5%	12.0%	1.1%	0.0%	1.6%	4.9%	0.0%	0.0%	CCS	65.8%	3.8%	0.0%		10.3%	0.0%
Chippewa	1.6%	20.7%	0.0%	0.0%	0.0%	8.8%	0.0%	0.0%		69.0%	0.0%	0.0%		0.0%	0.0%
Clark	0.8%	0.0%	0.0%	0.0%	0.8%	2.4%	0.0%	0.0%		95.9%	0.0%	0.0%		0.0%	0.0%
Columbia	0.6%	0.0%	27.2%	0.0%	0.0%	4.8%	0.0%	0.0%		65.7%	0.0%	0.0%		0.0%	1.6%
Crawford	0.0%	4.5%	0.0%	0.0%	0.0%	12.6%	0.0%	0.0%		81.1%	0.0%	1.8%		0.0%	0.0%
Dane	0.0%	0.0%	48.6%	0.0%	0.0%	9.8%	2.8%	0.0%		38.8%	0.0%	0.0%	CC	0.0%	0.0%
Dodge	0.0%	0.6%	16.4%	0.0%	0.0%	2.4%	0.0%	0.2%	CCS	80.1%	0.0%	0.0%		0.0%	0.4%
Door	0.0%	16.9%	0.0%	0.0%	5.6%	0.0%	0.0%	0.0%		77.5%	0.0%	0.0%		0.0%	0.0%
Douglas	0.0%	54.9%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%		19.8%	0.3%	0.0%		0.0%	0.0%
Dunn	0.0%	5.5%	0.0%	0.0%	23.6%	10.9%	6.4%	0.0%		53.6%	0.0%	0.0%		0.0%	0.0%
Eau Claire	0.0%	19.3%	0.0%	0.0%	3.3%	5.2%	0.0%	2.3%		67.4%	0.2%	0.4%	CC	1.9%	0.0%
Florence	0.0%	0.0%	3.7%	0.0%	14.8%	0.0%	0.0%	0.0%		81.5%	0.0%	0.0%		0.0%	0.0%
Fond du Lac	0.1%	19.9%	0.0%	0.0%	0.1%	1.9%	0.0%	0.0%	CCS	75.4%	0.0%	0.0%		0.0%	2.5%
Forest-Oneida-Vilas	0.7%	7.9%	2.1%	0.0%	14.0%	0.0%	0.0%	0.0%	CCS	75.2%	0.0%	0.1%		0.0%	0.1%
Grant-Iowa	0.0%	6.4%	9.1%	0.0%	0.0%	1.1%	0.0%	0.0%		83.5%	0.0%	0.0%		0.0%	0.0%
Green	0.0%	0.0%	8.8%	0.0%	0.0%	0.0%	0.0%	0.0%	CCS	90.7%	0.0%	0.0%		0.0%	0.5%
Green Lake	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	CCS	97.8%	0.0%	0.0%		0.0%	0.0%
Iron	3.6%	5.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		91.1%	0.0%	0.0%		0.0%	0.0%
Jackson	3.0%	10.5%	0.0%	0.0%	3.0%	2.3%	0.0%	0.0%		81.2%	0.0%	0.0%		0.0%	0.0%
Jefferson	0.0%	0.0%	12.5%	0.0%	0.0%	2.6%	0.0%	0.0%	CCS	84.9%	0.0%	0.0%		0.0%	0.0%
Juneau	0.0%	1.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%		96.6%	0.0%	0.0%		0.0%	0.0%
Kenosha	0.0%	4.9%	35.7%	0.0%	0.0%	0.0%	0.0%	0.4%	CCS	59.0%	0.0%	0.0%	CC	0.0%	0.0%
Kewaunee	0.0%	14.7%	0.0%	0.0%	3.8%	0.0%	0.0%	0.0%	CCS	69.0%	0.0%	0.0%		0.0%	12.5%
La Crosse	0.0%	10.3%	0.2%	0.0%	4.1%	8.7%	0.5%	0.7%	CCS	75.5%	0.0%	0.0%	CC	0.0%	0.0%
Lafayette	0.5%	0.0%	0.5%	0.0%	0.5%	2.0%	0.0%	0.0%		96.0%	0.5%	0.0%		0.0%	0.0%

	Inpatient	Medically Managed Detox	Other Residential Detox	Ambulatory Detox	Short-term Residential	Long-term Residential	Day Treatment	Community Support Program	Comprehensive Community Services*	Out-patient	Vocational	Supportive Housing	Child Care*	Transportation	Crisis Intervention
Service Base Estimates	0.8%	1.9%	7.2%	0.7%	7.4%	6.6%	12.3%	<.1%	<.1%	62.1%	0.2%	0.2%	0.2%	0.2%	0.2%
Langlade-Lincoln-Marathon	3.9%	12.9%	0.0%	0.0%	0.0%	1.6%	8.9%	0.2%	CCS	72.4%	0.0%	0.0%	CC	0.0%	0.0%
Manitowoc	0.0%	16.2%	0.0%	0.0%	2.8%	22.5%	0.0%	0.0%	CCS	58.5%	0.0%	0.0%		0.0%	0.0%
Marinette	0.6%	0.3%	0.0%	0.0%	1.9%	0.9%	0.0%	0.0%		96.2%	0.0%	0.0%		0.0%	0.0%
Marquette	0.0%	0.6%	6.8%	0.0%	0.0%	0.0%	0.0%	0.0%		92.5%	0.0%	0.0%		0.0%	0.0%
Menominee	0.0%	4.3%	0.0%	0.0%	7.1%	0.0%	0.0%	0.0%	CCS	82.9%	0.0%	0.0%		0.0%	5.7%
Milwaukee	0.0%	0.0%	25.6%	0.0%	0.5%	6.8%	5.9%	0.0%		59.8%	1.5%	0.0%	CC	0.0%	0.0%
Monroe	0.8%	1.6%	0.0%	0.0%	1.4%	4.3%	0.0%	0.0%		91.8%	0.0%	0.0%		0.0%	0.0%
Oconto	0.0%	22.3%	3.9%	0.0%	8.7%	1.0%	0.0%	0.0%		64.1%	0.0%	0.0%		0.0%	0.0%
Ooutagamie	0.0%	7.9%	0.0%	0.0%	1.5%	12.3%	15.1%	0.0%	CCS	59.7%	0.0%	3.5%		0.0%	0.0%
Ozaukee	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%	0.0%	0.0%		0.0%	0.0%
Pepin	0.0%	6.7%	0.0%	0.0%	20.0%	13.3%	6.7%	0.0%		53.3%	0.0%	0.0%		0.0%	0.0%
Pierce	1.1%	6.5%	0.5%	0.0%	0.5%	1.1%	0.0%	0.0%		90.2%	0.0%	0.0%		0.0%	0.0%
Polk	0.0%	1.4%	0.0%	0.0%	1.8%	2.5%	0.0%	0.0%		94.3%	0.0%	0.0%		0.0%	0.0%
Portage	0.0%	5.5%	0.0%	0.0%	0.0%	3.2%	2.2%	0.0%	CCS	89.1%	0.0%	0.0%		0.0%	0.0%
Price	15.2%	21.2%	0.0%	0.0%	6.1%	0.0%	0.0%	0.0%		57.6%	0.0%	0.0%		0.0%	0.0%
Racine	0.0%	6.4%	36.9%	0.0%	0.0%	17.8%	0.0%	0.0%		38.9%	0.0%	0.0%		0.0%	0.0%
Richland	0.0%	0.8%	3.2%	0.0%	1.6%	3.2%	0.0%	0.0%	CCS	91.3%	0.0%	0.0%		0.0%	0.0%
Rock	0.0%	0.0%	36.3%	0.0%	6.0%	2.9%	0.0%	0.0%		54.8%	0.0%	0.0%		0.0%	0.0%
Rusk	7.1%	18.6%	0.0%	0.0%	1.4%	1.4%	0.0%	0.0%		71.4%	0.0%	0.0%		0.0%	0.0%
St. Croix	1.6%	9.9%	0.0%	0.2%	5.6%	1.1%	0.0%	0.0%	CCS	81.3%	0.0%	0.0%		0.0%	0.2%
Sauk	0.0%	3.0%	17.1%	0.0%	4.2%	0.5%	3.2%	0.0%	CCS	55.2%	0.0%	0.0%		0.0%	16.3%
Sawyer	2.1%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		94.3%	0.0%	0.0%		0.0%	0.0%
Shawano	0.9%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	CCS	83.4%	0.0%	0.0%		0.0%	14.5%
Sheboygan	0.1%	9.8%	0.0%	0.0%	0.0%	4.5%	0.0%	0.1%	CCS	83.6%	0.4%	0.0%		0.0%	1.6%
Taylor	1.7%	3.4%	0.0%	0.0%	5.1%	0.8%	0.0%	0.0%		88.1%	0.0%	0.0%		0.0%	0.8%
Trempealeau	0.0%	9.8%	0.0%	0.0%	7.6%	8.7%	0.0%	0.0%		46.7%	0.0%	0.0%		0.0%	27.2%
Vernon	1.4%	1.4%	0.0%	0.0%	1.4%	6.8%	0.0%	0.0%		89.0%	0.0%	0.0%		0.0%	0.0%
Walworth	0.0%	25.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	CCS	74.7%	0.0%	0.0%		0.0%	0.0%
Washburn	0.0%	4.8%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%		93.3%	0.0%	0.0%		0.0%	0.0%
Washington	0.8%	12.3%	3.8%	0.0%	0.8%	8.5%	15.4%	0.0%	CCS	58.4%	0.0%	0.0%		0.0%	0.0%
Waukesha	0.0%	2.6%	8.1%	0.0%	4.7%	4.4%	0.8%	0.0%	CCS	74.3%	0.0%	1.6%	CC	3.6%	0.0%
Waupaca	0.0%	10.6%	0.0%	0.0%	1.0%	3.8%	0.0%	0.0%		74.0%	0.0%	1.0%		0.0%	9.6%
Waushara	0.0%	1.2%	0.0%	0.0%	3.7%	2.1%	0.0%	0.0%	CCS	92.9%	0.0%	0.0%		0.0%	0.0%
Winnebago	0.0%	2.7%	0.0%	0.0%	3.6%	3.9%	0.0%	0.0%	CCS	89.8%	0.0%	0.0%	CC	0.0%	0.0%
Wood	0.0%	7.2%	0.0%	0.0%	1.3%	6.6%	14.2%	0.0%	CCS	70.7%	0.0%	0.0%		0.0%	0.0%

Source: Human Services Reporting System, 2008; duplicated count; outpatient includes case management; assessments only not included in the data.

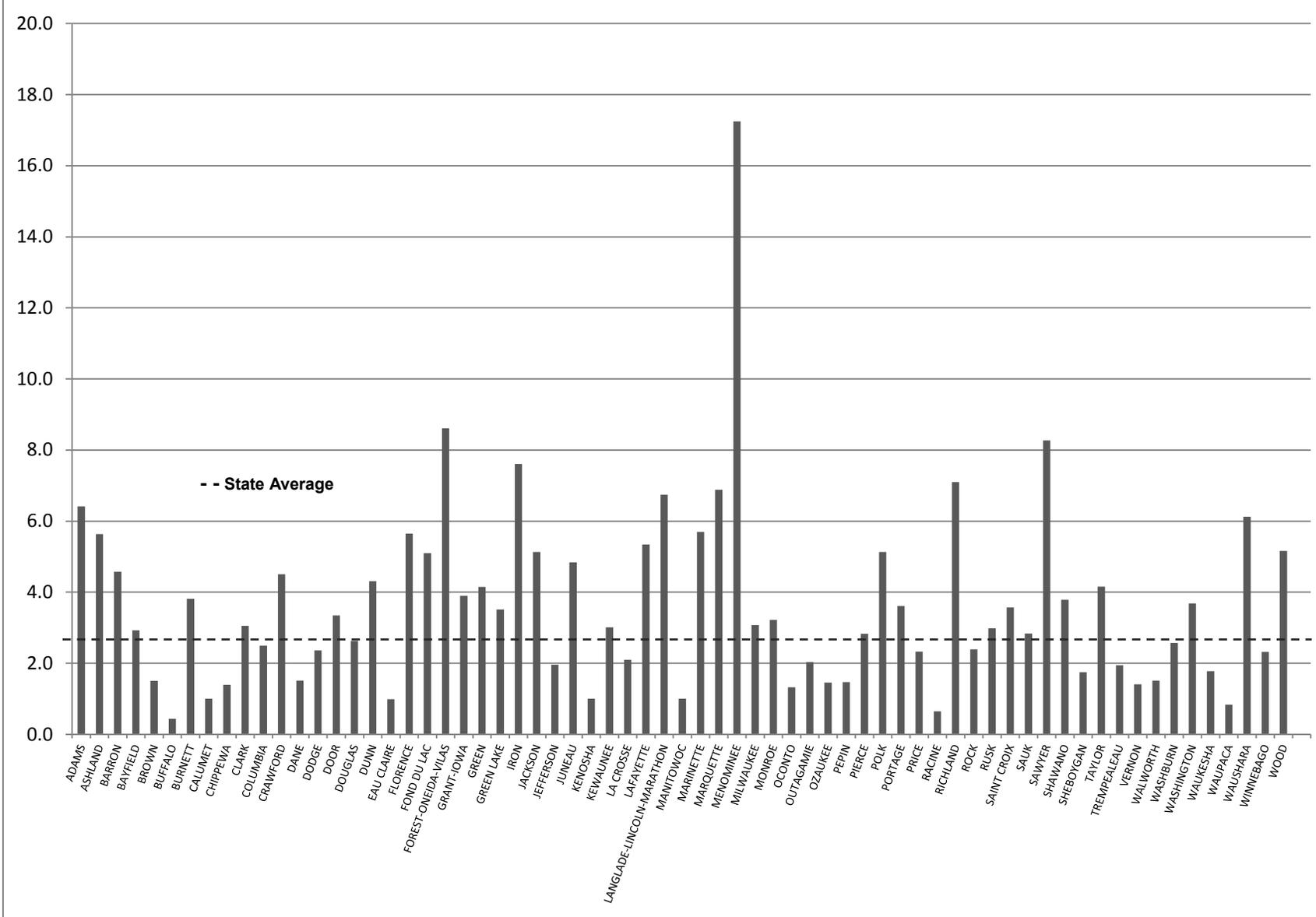
*No data available, however, Counties with significant activities are indicated.

The chart below looks more closely at Wisconsin’s utilization of detox services subsidized with county and state funds. In order to compare the Wisconsin and U.S. trends on the same graph, the Wisconsin data are actual admissions and the U.S. data are expressed in hundreds (3890.63 hundreds = 389,063 actual U.S. admissions). The Wisconsin trend in detox admissions is upward while the U.S. trend is downward. Considering the previous table entitled, Wisconsin County Mental Health and Substance Abuse Infrastructure Initiative, there are several counties that appear to have disproportionately high utilization of detox services (Bayfield, Brown, Chippewa, Columbia, Dane, Dodge, Door, Douglas, Eau Claire, Fond du Lac, Kenosha, Kewaunee, Manitowoc, Milwaukee, Oconto, Price, Rusk, Sauk and Walworth).



Do differences exist in the number of persons treated for a substance use disorder per capita by county? The chart on the following page displays the number of county-authorized persons treated per capita for each Wisconsin county agency in 2010. These data exclude detox and brief services such as evaluations. The differences can be explained by the county’s substance abuse prevalence, amount of funding and revenue available for services, poverty rate, clinical staff turnover issues and data reporting practices. Further analysis is necessary to determine the explanation for an individual county’s rate. Twenty-three (34%) county agencies are 50% higher than the state average; 8 (12%) county agencies are 50% lower than the state average; and 36 (54%) county agencies are within the state average.

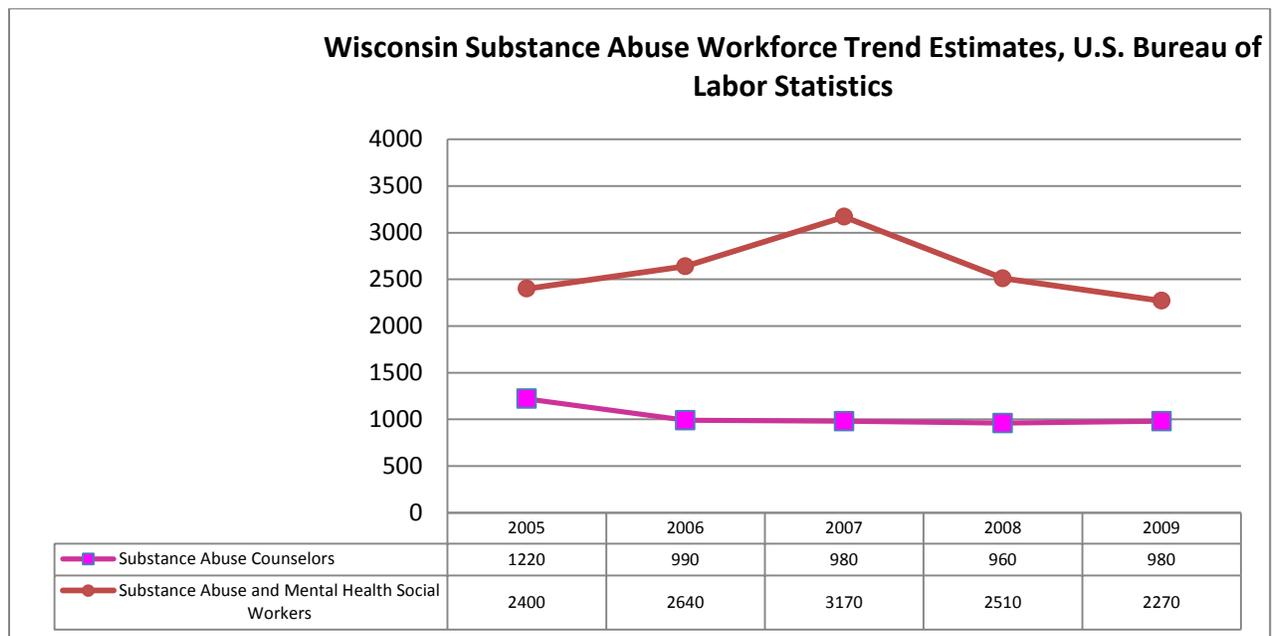
Persons Treated For Substance Abuse Per 1,000 Population, 2010, Human Services Reporting System



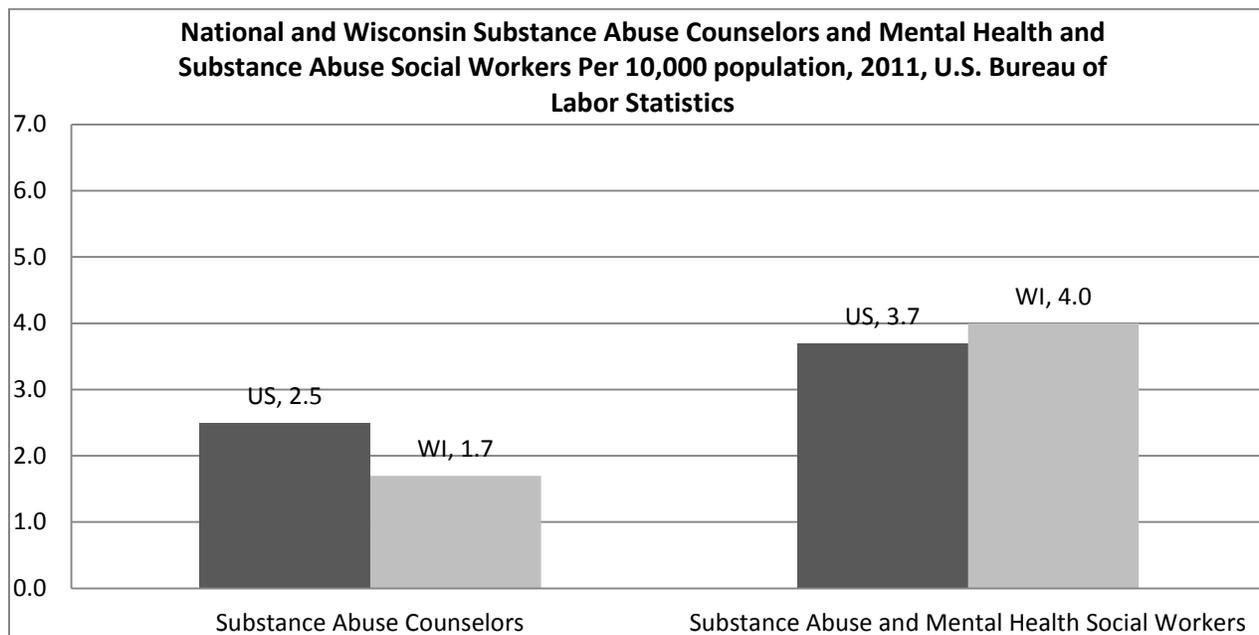
Substance Abuse Treatment Workforce

Anecdotal complaints from several substance abuse treatment agencies and the 2012 Wisconsin substance abuse counselor survey have identified issues related to possible workforce shortages.⁶⁹ Agencies often report advertising open positions widely throughout the state but receiving few if any applicants. According to the Wisconsin Department of Safety and Professional Services there are an estimated 1,920 active or inactive, licensed or certified substance abuse treatment professionals in Wisconsin. Nine hundred sixty seven (967) responded to the 2012 Wisconsin substance abuse counselor survey. As previously discussed, Hispanic persons receive treatment at a rate lower than their occurrence among those in need of treatment. There is a related finding from the counselor survey indicating a need for more Hispanic counselors. Hispanic counselors comprised just 3% of the survey respondents while 5.6% of the prevalence of substance abusers are people of Hispanic ethnicity. There is also a disproportionate rate (55%) of counselors age 51 and older with 24% of counselors at or near retirement age (age 60+) indicating that a crisis could be looming if the older counselors are not replaced by younger ones. In addition to the worker shortage issues, the survey found reports of inadequate compensation and stigma associated with the occupation of substance abuse counselor.

Also useful in this workforce analysis is data from the U.S. Bureau of Labor Statistics. In 2011, the U.S. Bureau estimates there are 980 employed substance abuse counselors in Wisconsin and another 2,270 professionals in the single category “mental health and substance abuse social workers”.⁷⁰ These data are helpful in looking at trends and making comparisons with national averages. The following chart shows annual trends for Wisconsin workers indicating that the overall substance abuse professional workforce in Wisconsin may be shrinking while the U.S. Bureau is projecting a 33% increased need for substance abuse and mental health professionals by the year 2016.



This next chart compares the Wisconsin substance abuse professional workforce per 10,000 population with the national average. The chart documents the need for 440 more Wisconsin substance abuse counselors and 165 fewer Wisconsin substance abuse and mental health social workers in order to match the national average. Overall there is a net need for 275 (440 minus 165) more Wisconsin substance abuse professionals to match the national average.



Mental Health Treatment Workforce

As described at the beginning of this section, statewide workforce FTE data is not frequently available by provider profession, service specialty, etc. But some estimates of the need for mental health professionals, especially psychiatrists who are known to be in short supply, have been calculated through individual research studies. In addition, Wisconsin’s Office of Primary Care is responsible for tracking health care professional shortages in the state, including psychiatrists, and coordinating federal grants targeted to address these shortages.

A series of articles in 2009 examined mental health professional supply and shortage problems by county across the nation⁷¹⁻⁷³. One article examined the unmet need for mental health professionals, including psychiatrists, psychologists, advanced practice psychiatric nurses, social workers, licensed professional counselors, and marriage and family therapists. Unmet county-level need was measured by estimating the prevalence of serious mental illness (SMI) and provider time needed by individuals both with and without SMI.

Over three-quarters (77%) of U.S. counties had a severe shortage of either psychiatrists or other professionals, meaning over half their need was unmet. Eight percent of U.S. counties had a severe shortage of non-prescribing mental health professionals and 18% of counties in the nation had at least some unmet need for non-prescribers. Much of the unmet need is with psychiatrists. Seventy-seven percent of U.S. counties had a severe shortage of psychiatrists and 96% had at least some unmet need for psychiatrists. Rural counties and those with low per capita income tended to have higher levels of unmet need.

Wisconsin counties followed this pattern. The counties with the greatest overall need for any mental health professionals were Menominee, Crawford, Richland, Sauk, Adams, Marquette, Buffalo, Clark, Taylor, Price, Iron, Sawyer, Washburn, and Burnett – all mostly rural counties. All of these counties had rates of unmet need for mental health professionals that put them in the top quartile nationally for unmet need. Most other counties with similarly high levels of unmet need are found in the Great Plains, Rocky Mountains, or Alaska. Wisconsin counties in the lowest quartile nationally were primarily in the southeast area of Wisconsin extending from Kenosha to Dane to Brown County.

Wisconsin's Office of Primary Care within the Division of Public Health provides more detailed data on psychiatrist shortages within Wisconsin counties through its own data collection efforts from 2009-2012⁷⁴. The map and table on the following three pages provide specific information about psychiatrist shortages in Wisconsin counties and how many are needed to eliminate the shortages. A significant shortage means having a ratio of 10,000 population to 1.0 FTE psychiatrist or higher. A 20,000 to 1.0 FTE ratio is required to qualify for a federal designation as a Health Professional Shortage Area (HPSA) and be eligible for federal benefits. Both designations are listed in the following table. Counties who are not eligible for a HPSA designation status either do not meet the population to psychiatrist ratio or are contiguous to a county with adequate psychiatrists they could access.

All but four counties (including Dane) have some level of psychiatrist shortages. Eight primarily rural counties have shortages of less than 1.0 FTE and six primarily urban counties have shortages of 10 FTE's or more. Also noteworthy for prioritizing state psychiatrist needs is that the following 16 counties reported 0 psychiatrist FTEs providing on-site outpatient care:

- Buffalo
- Burnett
- Chippewa
- Florence
- Forest
- Green Lake
- Iron
- Kewaunee
- Lincoln
- Pepin
- Price
- Richland
- Rusk
- Trempealeau
- Washburn
- Waupaca

Number of Psychiatrists Needed to Reduce Significant Shortage

County	# Psychiatrist FTEs * needed to reduce sig. shortage	Resident Civilian Population	Mental Health HPSA status (as of June 2012)
<i>Wisconsin</i>	N/A	5,486,658	
Adams	1.8	19,646	County
Ashland	0.6	15,541	Not eligible – # psych
Barron	2.3	45,396	County
Bayfield	1.4	14,655	County
Brown	8.5	236,714	Not eligible – # psych
Buffalo	1.4	13,657	Not eligible – contiguous
Burnett	1.5	15,380	County
Calumet	4.6	47,493	Not eligible – contiguous
Chippewa	6.0	60,292	Not eligible – contiguous
Clark	3.2	33,933	County
Columbia	4.6	54,387	County
Crawford	1.3	16,056	County
Dane **	0.0	464,510	Not eligible – # psych
Dodge	5.5	81,526	County
Door	1.9	27,724	County
Douglas	4.0	42,189	County
Dunn	3.2	39,849	County
Eau Claire	0.7	92,416	Not eligible – # psych
Florence	0.5	4,511	County
Fond du Lac	3.0	98,347	Not eligible – # psych
Forest	0.9	9,215	County
Grant	4.0	46,753	County
Green	0.3	35,984	Not eligible – # psych
Green Lake	1.9	19,036	Not eligible – contiguous
Iowa	2.1	23,449	County
Iron	0.6	5,840	County
Jackson	1.3	18,871	County
Jefferson	5.6	80,253	County
Juneau	2.5	26,600	County
Kenosha	10.5	160,047	Not eligible – contiguous
Kewaunee	2.0	20,369	County
La Crosse	-0.7	107,543	Not eligible – # psych
Lafayette	1.4	16,577	County
Langlade	1.2	19,775	County
Lincoln	2.9	28,553	County
Manitowoc	7.2	80,370	County
Marathon	9.5	130,865	County
Marinette	2.7	40,112	County
Marquette	1.3	15,324	County
Menominee	0.2	4,251	County
Milwaukee Inner City **	17.8	350,243	Inner City**

County	# Psychiatrist FTEs * needed to reduce sig. shortage	Resident Civilian Population	Mental Health HPSA status (as of June 2012)
Monroe	4.1	43,524	County
Oconto	3.5	37,280	County
Oneida	-0.1	35,415	County
Outagamie	10.2	171,629	Not eligible – contiguous
Ozaukee	4.1	84,941	Not eligible – contiguous
Pepin	0.7	7,336	County
Pierce	3.6	37,791	Not eligible – contiguous
Polk	1.9	43,821	County
Portage	4.4	65,720	Not eligible – contiguous
Price	1.4	14,156	County
Racine Inner City **	-4.5	19,261	Inner City**
Richland	1.8	18,002	County
Rock	10.2	156,695	Beloit & Janesville
Rusk	1.5	14,531	County
Saint Croix	7.2	81,763	Not eligible – contiguous
Sauk	4.5	60,179	County
Sawyer	1.3	16,277	County
Shawano	3.4	40,957	County
Sheboygan	7.3	111,879	Being reviewed
Taylor	1.9	20,333	County
Trempealeau	2.8	27,869	County
Vernon	2.5	28,969	County
Vilas	2.1	21,553	County
Walworth	8.2	98,813	County
Washburn	1.5	15,042	County
Washington	10.1	129,170	Not eligible – contiguous
Waukesha	22.9	381,495	Not eligible – contiguous
Waupaca	5.1	50,725	County
Waushara	2.0	23,248	County
Winnebago	2.2	155,133	Not eligible – # psych
Wood	2.9	73,782	Not eligible – # psych

** Data is incomplete for these counties except for the inner city areas of Milwaukee and Racine.

Status of Efforts to Increase Capacity

An annual survey of Wisconsin's 72 Community Support Programs (CSPs) includes questions about the use of waitlists. The State DHS allocates \$1 million dollars annually to CSPs to help relieve these waitlists, although the funding is not enough to eliminate them. While some of the consumers put on the waitlists received other services while they waited, the waitlist totals are a good indicator of the size of the gap in capacity for CSPs specifically. Twenty (28%) of the 72 CSPs reported the use of waiting lists in 2011 for participants they could not actively serve⁷⁵. There were 422 participants on these waitlists at some time during 2011, an increase of 100 people over 2010. Programs reported that the average time on their CSP waitlist for consumers was 6 months. The table below describes which counties had inadequate capacity in their CSPs ranked by number of consumers on their waitlist in 2011. The actual additional CSP slots needed per county may be slightly less than the figures below which represent total consumers who may could be removed from the list and replaced by another consumer during the year.

Community Support Program Capacity Needs in 2011

County	Total CSP Consumers on the Waitlist 2011
Jackson	1
Lafayette	5
Clark	6
Rock	6
Bayfield	9
Forest, Oneida, Vilas	12
Racine	12
Green	13
Monroe	15
Vernon	17
Sheboygan	23
Polk	25
Columbia	26
Waukesha	27
Ashland	28
Sawyer	33
Dane (2 CSPs)	40
Sauk	43
Kenosha	81
Total	422

Inadequate workforce capacity can sometimes be due to a geographical mismatch between available workers and consumers in need. The use of TeleHealth in Wisconsin since 2007 has been increasing to help address this need. As described above, psychiatry services in particular are lacking in many rural areas, but may be in surplus in some urban areas such as Dane County. The table below describes the number of TeleHealth certifications in 2012 for an array of MH/AODA services⁷⁶. The number of providers offering TeleHealth is less than the 113 certifications as some providers are certified to provide multiple TeleHealth services. TeleHealth is used approximately twice as much for mental health services compared to substance abuse

services. Although there's room for expansion among all services, TeleHealth seems to be currently used more often for regular outpatient services and less for emergency/crisis services and psychosocial rehabilitation programs (CCS and CSP). Increased use of TeleHealth in CSPs could potentially be part of the solution to relieving the waitlist issue described above.

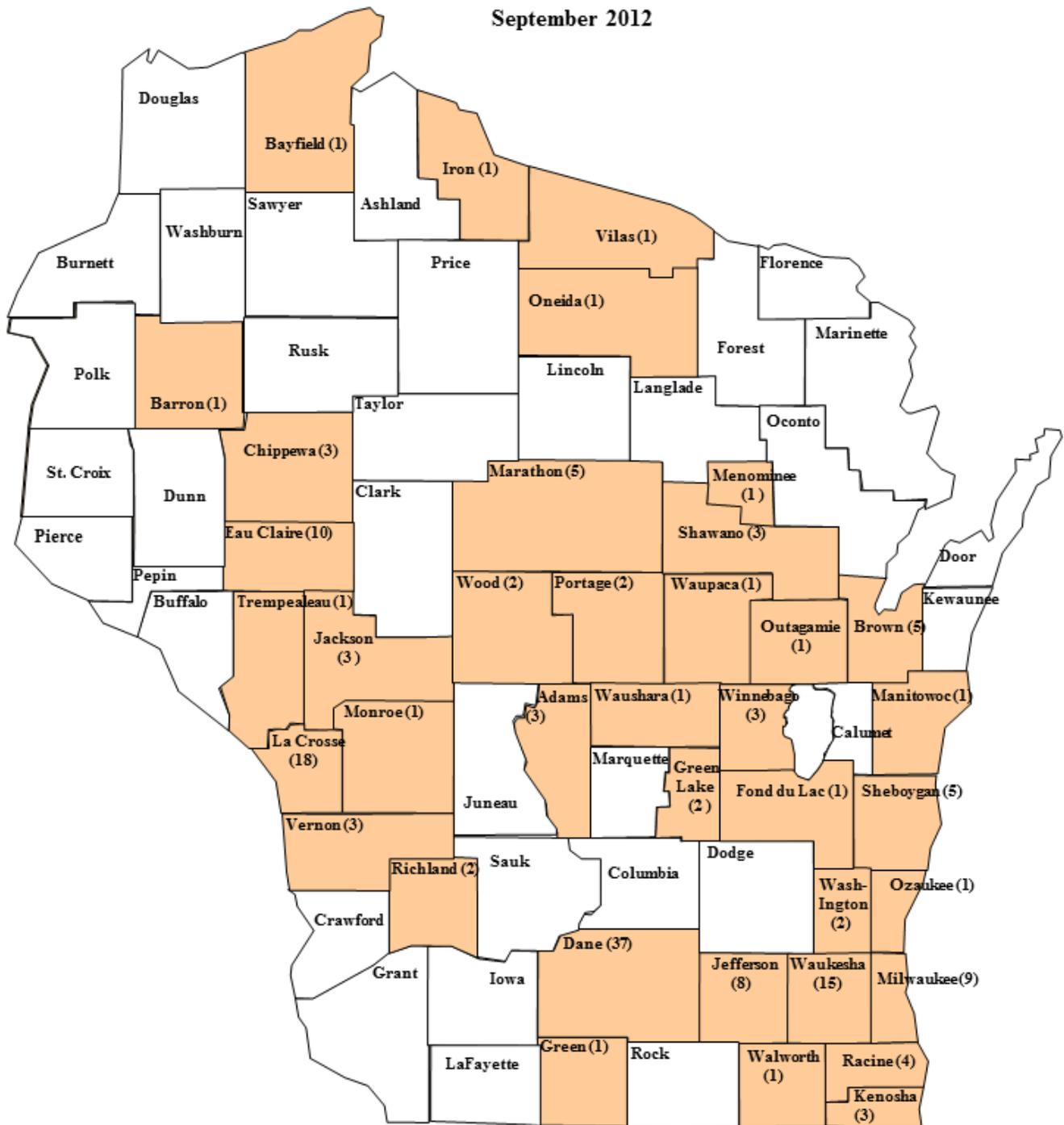
Number of Mental Health/Alcohol and Other Drug Abuse TeleHealth Certifications 2012

Type of Service	# of Certifications
DHS 35 MH Outpatient	46
DHS 40.11(2)(a-c) Children's Day Treatment	13
DHS 34.3 MH Crisis	10
DHS 63 CSP	6
DHS 36 CCS	3
DHS 61.75 Day Treatment	2
DHS 75.13 AODA Outpatient	23
DHS 75.05 AODA Emergency Outpatient	6
DHS 75.12 AODA Day Treatment	2
DHS 75.14 AODA Transitional Residential	1
DHS 75.04 AODA Prevention	1
Statewide Total	113

Although the initiative in Wisconsin is still relatively young, the number of peer specialists being trained to join the mental health workforce has been steadily increasing through efforts by the Department of Health Services. Peer specialists can not only increase the capacity of an agency's work force, they can also improve the quality and effectiveness of treatment by establishing a collaborative, trusting relationship between the provider agency and the consumer. Work needs to be done to better connect certified peer specialists to mental health programs, educate prospective mental health agencies as to the value of peer specialists, and distribute peer specialists to cover a larger portion of the state. In September, 2012 there were 193 Certified Peer Specialists in Wisconsin. A 2011 survey found that all but 17 of the 114 certified peer specialists at the time were employed.⁷ Below is a map showing the geographic locations of the trained and certified peer specialists illustrating which parts of the state could improve their workforce capacity by adding peer specialists.

Certified Peer Specialists by County

September 2012



Counties with Certified Peer Specialists (# of CPS)

Providers' Assessment of Their Own Capacity Needs

What do providers believe are the greatest needs when it comes to their capacity to meet the demand for MH/AODA services? Providers are the people who determine who will be enrolled immediately and who will be placed on a waiting list or turned away altogether. Providers must determine which programs or services are appropriate and available to meet consumers' needs.

In 2009, The Management Group, Inc. conducted a study for the Department of Health Services examining the MH/AODA service system infrastructure which included such a provider assessment of unmet capacity needs⁷⁸. Nine county service areas were selected for interviews to provide a representative sample of the state's 67 public MH/AODA service systems. Providers assessed the following areas of the MH/AODA service systems to have the greatest unmet need:

- Outpatient services
 - Psychiatrist and nurse time, especially to prescribe and manage medications
 - Child psychiatry services
 - Wait times of up to 3-6 months
 - Limited choice for indigent consumers
 - Providers willing to accept Medicaid reimbursement rates
- Crisis services
 - Mobile crisis services
 - Timely follow-up to crisis
 - Crisis beds
 - Crisis diversion beds for those with substance abuse issues
- Inpatient services
 - Community inpatient capacity
 - Alternative inpatient facility that is less costly than the state mental health institutes
- Substance abuse services
 - Service capacity for those with painkiller addictions
 - Cognitive behavioral element in substance abuse treatment
- Early intervention and prevention services.
- Support services (e.g., vocational, peer support) to help avoid treatment and crisis.
- Services for those with less persistent and serious mental illness (i.e., those lower on the priority list).
- Services for those that are dually diagnosed with mental health, physical health and substance abuse issues, especially those addicted to pain medication.
- Services for nursing home residents with dementia and behavioral issues that cannot be safely managed in a nursing home setting.

IV. Effectiveness of Wisconsin's Mental Health and Alcohol and Other Drug Abuse Services

The purpose of this section is to examine to what degree consumers are treated effectively in Wisconsin's MH/AODA service system. Four broad areas will be examined:

1. Quality and appropriateness of services.
2. Consumer outcomes.
3. Impact.
4. Other stakeholder input about service needs.

Once consumers access services, many factors can influence whether consumers' needs have been met before being discharged from treatment. Services provided to consumers must be appropriately matched to their specific needs and services must be delivered in a quality manner according to treatment standards and using best practices when possible. Needs and gaps in the areas of quality and appropriateness are important to examine because they sometimes can be more readily addressed through the addition of training components for staff.

Ultimately, the effectiveness of services must be assessed based on the outcomes of the service experience for the individual consumer. Consumer outcomes, such as reduction in alcohol use and employment status, are examined. An epidemiological approach is used to examine broad system and societal impacts such as hospitalization rates and alcohol-related traffic deaths.

A summary of important input from consumers and Tribal Nations is also presented.

Quality and Appropriateness of Services

Some important issues related to the quality and appropriateness of services received by consumers examined in this section include:

- Are evidence-based practices (EBPs) used to deliver quality services with proven effectiveness?
- Are services delivered in a Recovery-based manner?

Use of Evidence-Based Practices

Substance Abuse Prevention

The use of evidence-based prevention approaches has been evolving slowly. It wasn't until 2007 that the Federal government provided an accessible listing of evidence-based prevention programs called the National Registry of Evidence-based Programs and Practices (NREPP). Finding a national study on the utilization of evidence-based prevention approaches has been challenging. Prior to the availability of the Federal NREPP listing, a survey was conducted in 2005 of a nationally representative sample of 1,721 schools with middle school grades and having drug prevention programs. The survey found that 42.6% of the nation's schools with middle school grades and drug prevention programs were using an evidence-based curriculum and the use of evidence-based approaches appears to be growing.⁷⁹

According to the 2011 Substance Abuse Prevention Services Information System (SAPSIS) there are a reported 267 substance abuse prevention programs of various types across Wisconsin. While data may be available from several states using the Knowledge-based Information Technology (KIT) system, obtaining comparable national data is not possible at this time. Comparable data for 2011 from the state of Oregon's prevention Minimum Data Set is presented as analogous data source. Oregon's data represents 1,362 prevention programs. The table that follows shows the percent of prevention programs targeting various populations. Wisconsin is generally comparable to Oregon although Wisconsin prevention programs target more persons already using substances and fewer economically disadvantaged populations (see the table below).

Programs Targeting Substance Use Prevention Populations

Population Targeted	Percent of Prevention Programs	
	Wisconsin (n=267)	Oregon (n=1,362)
Victims of physical, emotional or sexual abuse	1.5%	Less than 1%
Persons already using substances	11.6%	6.2%
Children of substance abusers	2.6%	1.1%
High school dropouts	Less than 1%	1.1%
Economically disadvantaged persons	10.1%	25.3%
General population of children, youth and adults	66.3%	64.7%
Homeless persons in general including or runaway youth	Less than 1%	Less than 1%
Persons with mental health issues	2.2%	Less than 1%
Pregnant females, all ages	1.1%	Less than 1%
Juvenile delinquents	3.4%	Less than 1%
Total	100%	100%

Substance Abuse Treatment

Treatment service quality can be analyzed by looking at whether or not services meet good clinical and safety standards, utilize evidence-based approaches or other proof that clients are satisfied with services, consider service right for them, and report that they are benefitting from services.

All Wisconsin substance abuse service providers receiving state or county funds (estimated at 140) must meet minimum clinical and safety standards set down in law. However, data are not readily available on provider violations, citations, suspensions or terminations issued.

While the use of evidence-based practices and client satisfaction are on the list of priorities among stakeholders, Wisconsin-specific substance abuse data on these areas is currently unavailable. National studies suggest that the vast majority (70%) of addiction treatment counselors would agree that it is good practice to use treatment approaches proven by research. However, only 40% may actually use evidence-based practices. Barriers include lack of time or funds, lack of administrative support, insurance restrictions, and potential client resistance. What's equally important is collecting and using data on treatment effectiveness in order to "prove the practice."⁸⁰⁻⁸²

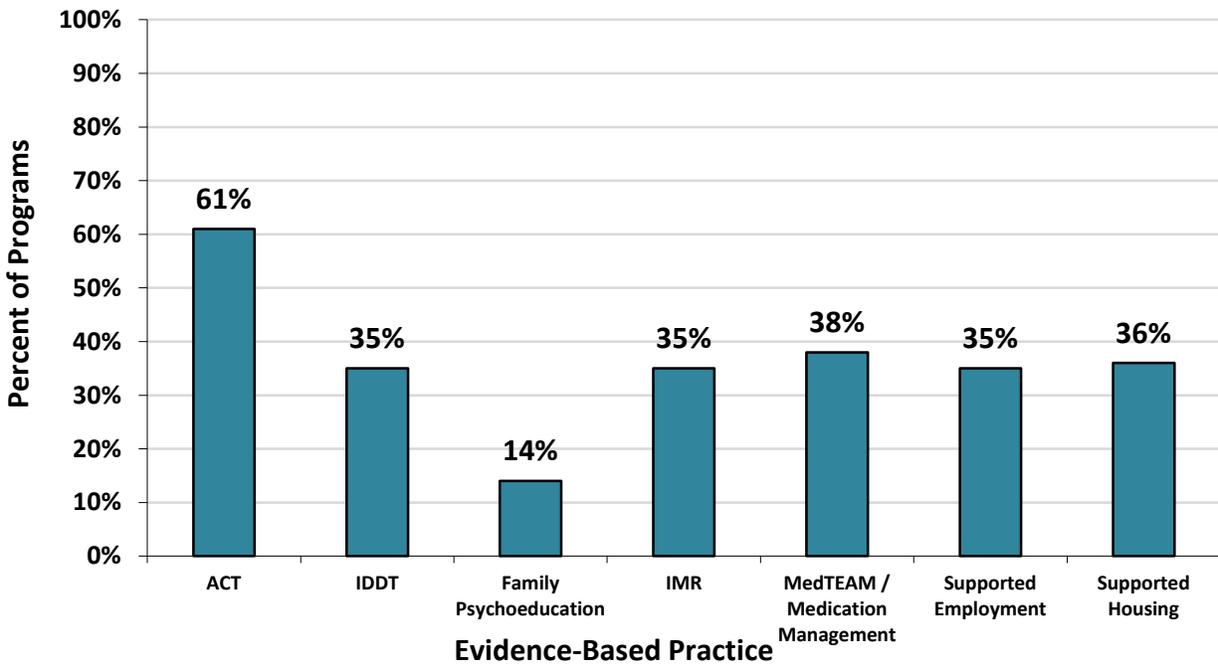
Mental Health

One of the federal Community Mental Health Services Block Grant reporting requirements for all states is to report on their use of EBPs which serves as an indicator of the effectiveness of states' treatment. While EBPs may potentially be used throughout Wisconsin by a variety of public and private providers, the available DHS data on county systems' use of EBPs is focused on CSPs.

The Division of Mental Health and Substance Abuse Services (DMHSAS) conducts an annual survey of all CSPs across the state. The survey has asked program staff for information on their use of EBPs since 2007. The DMHSAS provided grant funding to select counties from 2006-2008 to implement EBPs for adults and has more recently funded training for Supported Employment, but counties and CSPs have been on their own otherwise to select and implement EBPs.

Rates of EBP use by the 78 CSPs in 2011 are displayed in the chart below and were similar to those reported in 2010.⁸³ Of the 72 CSPs reporting in 2011, Assertive Community Treatment (ACT) was used by 61% of programs (N=44). All other EBPs such as Integrated Dual Disorder Treatment (IDDT) and Illness Management and Recovery (IMR) were used by just over a third of programs with the exception of Family Psychoeducation. Eighty-two percent of CSPs used at least one EBP with their consumers, including Lafayette County, Eau Claire County, Milwaukee County Department of Health and Human Services, and Dane County's Program of Assertive Community Treatment who used six each.

CSPs' Use of EBPs in 2011



Trends in the number of consumers served with EBPs over the last few years are unclear because of challenges in working with CSPs to report EBP use in a consistent manner. Trend changes in the number of consumers served with EBPs should be reliable and available in the near future.

To what degree did CSPs implement EBPs faithful to the prescribed treatment model to ensure the most effective and highest quality service was provided? CSPs were asked to report on several aspects of the implementation of each EBP including:

1. Have CSP staff been specifically trained to implement this EBP?
2. Did you use the official EBP toolkits to guide your implementation?
3. Did you monitor the fidelity of your implementation?

4. Did you use an outside monitor to review fidelity?

The first issue of quality treatment provision within CSPs is to what degree they have implemented the ACT model on which CSPs are based. Of the 44 CSPs who used ACT, 86% have trained their staff on ACT in some way. However, just over half of these CSPs have used the official ACT implementation toolkit or monitored the fidelity of their implementation. Most programs have monitored their own fidelity as opposed to enlisting an independent outside monitor. Thus, the primary quality issue for CSPs worth further examination is what type of treatment is being provided by the 39% of CSPs that are not using the ACT model. For those using ACT, more emphasis may be needed on using the official ACT implementation toolkit, including its fidelity measures. The same pattern of implementation exists for the other EBPs used among CSPs as well.

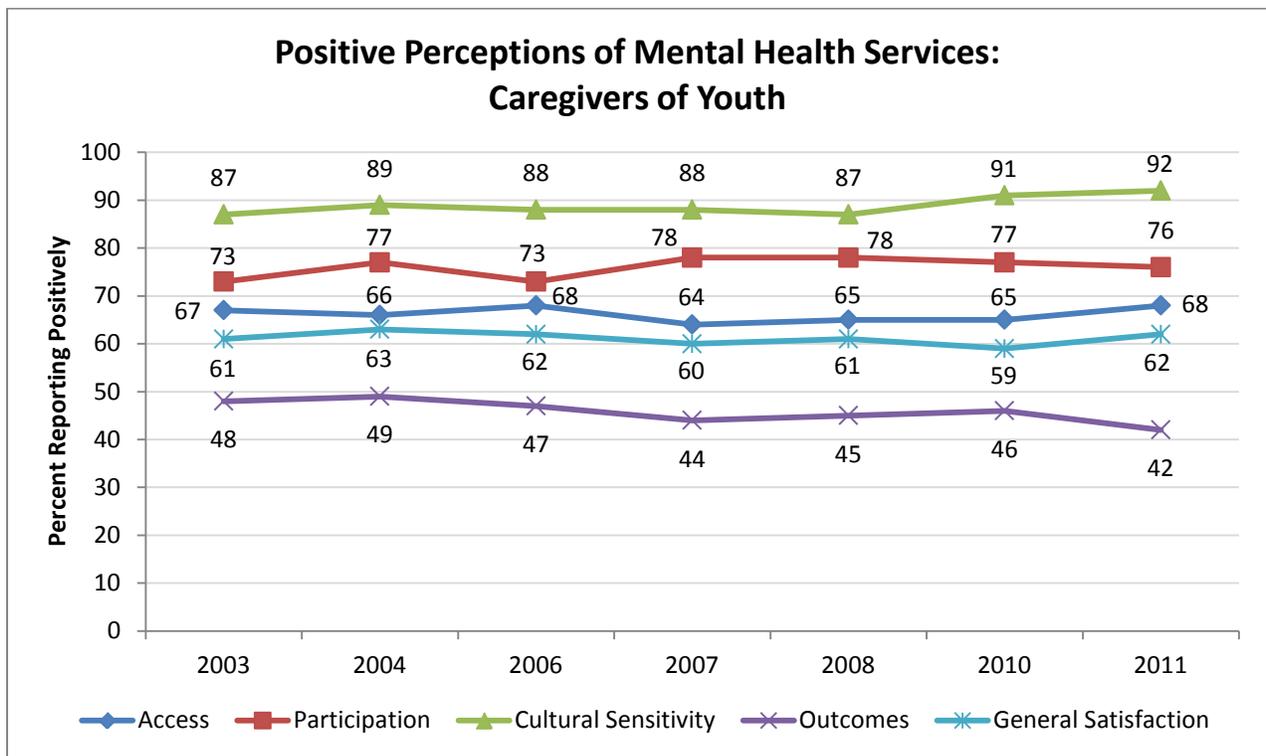
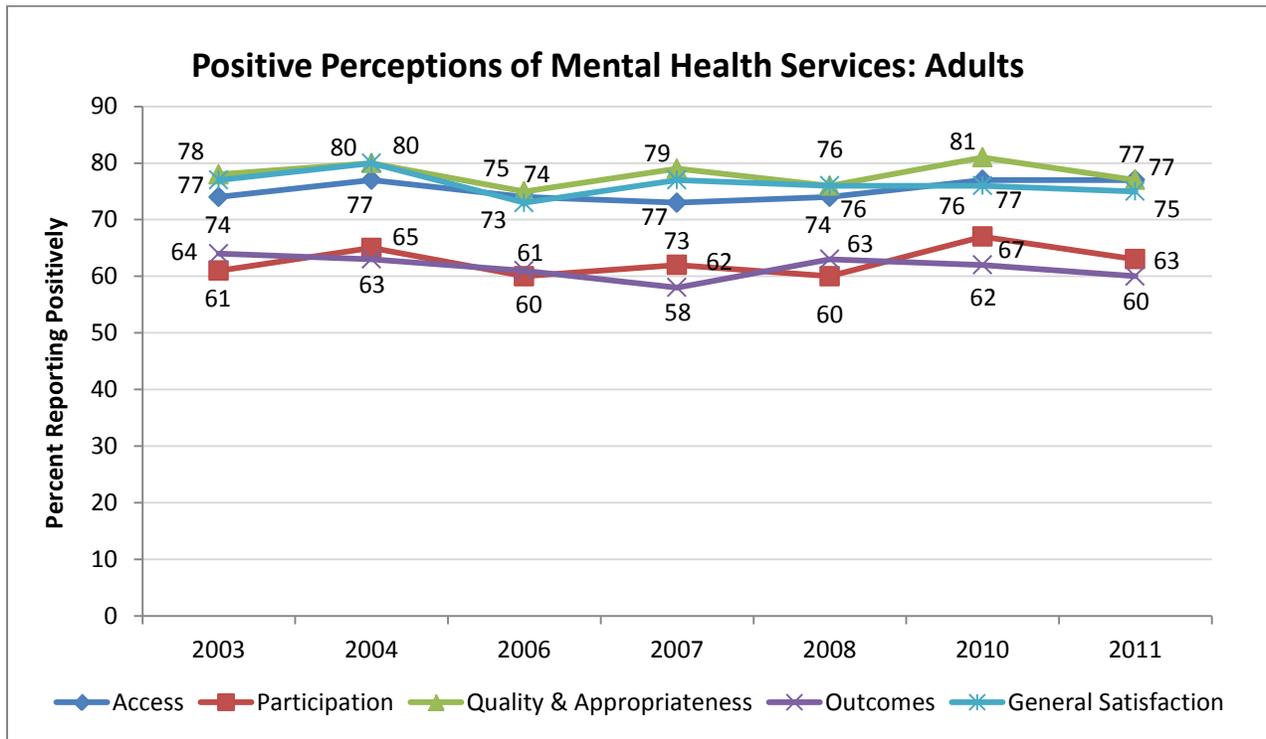
ACT Implementation within CSPs in 2011 (N=44)

Implementation Step	% of CSPs
1. Staff Trained	86%
2. EBP Toolkits Used	57%
3. Monitored Fidelity	52%
4. Outside Monitor Used	14%

Consumer Satisfaction with Mental Health Treatment Quality

Although the CSP survey is completed by providers, consumer input is also available to assess the quality of mental health services delivered across the state. Consumer input is a better source for understanding how he/she was treated during their service experience. Whether the consumer was treated with respect, involved as an equal partner in establishing their treatment plan and goals, treated with respect to their cultural heritage and other specific individual needs, etc., are assessments that are best made from the consumer's perspective.

As a result, the DMHSAS distributes a satisfaction survey to consumers of public mental health services across the state every year. A random sample of adult and youth consumers with serious mental illness or severe emotional disorders (SMI/SED) is surveyed. For youth 6-17 years old, the primary caregiver completes the survey about their satisfaction with their child's mental health services. For analyses, satisfaction questions are grouped into scales corresponding to several areas (or "domains") of satisfaction, including general satisfaction, quality and appropriateness, access, participation in services, and functional outcomes. Questions are not the same between the adult and youth surveys. Trends and individual question responses are displayed in the charts on the following two pages.⁸⁴



2011 Adult Mental Health Consumers' Satisfaction with Services

	Strongly Disagree	Disagree	Un-decided	Agree	Strongly Agree
PARTICIPATION IN TREATMENT PLANNING					
I felt comfortable asking questions about my treatment and medication.	5%	6%	9%	43%	37%
I, not staff, decided my treatment goals.	6%	11%	18%	37%	29%
QUALITY AND APPROPRIATENESS OF SERVICES					
Staff believed that I can grow, change and recover.	4%	6%	19%	39%	34%
I felt free to complain.	6%	7%	19%	37%	31%
I was given information about my rights.	4%	4%	6%	40%	46%
Staff encouraged me to take responsibility for how I live my life.	4%	5%	14%	46%	31%
Staff told me what side effects to watch out for.	4%	10%	16%	40%	30%
Staff respected my wishes about who is and is not to be given information about my treatment.	3%	3%	10%	42%	42%
Staff was sensitive to my cultural background.	4%	4%	12%	43%	38%
Staff helped me obtain the information I needed to take charge of managing my illness.	6%	6%	15%	43%	30%
I was encouraged to use consumer-run programs.	5%	13%	13%	40%	30%

2011 Caregivers' Satisfaction with Youth Mental Health Services

	Strongly Disagree	Disagree	Un-decided	Agree	Strongly Agree
PARTICIPATION IN TREATMENT PLANNING					
I helped to choose my child's services.	6%	12%	8%	44%	30%
I helped to choose my child's treatment goals.	3%	9%	11%	47%	31%
I participated in my child's treatment.	1%	3%	6%	49%	41%
CULTURAL SENSITIVITY					
Staff treated me with respect.	1%	2%	7%	46%	44%
Staff respected my family's religious/spiritual beliefs.	1%	0%	10%	48%	42%
Staff spoke with me in a way that I understood.	0%	1%	6%	50%	44%
Staff were sensitive to my cultural/ethnic background.	>1%	>1%	6%	52%	41%

A summary of adult consumers' satisfaction with the quality and appropriateness of their treatment include:

- Adults' satisfaction with the overall quality and appropriateness of their mental health services has been relatively high compared to other areas at 75-80%. Levels of satisfaction have not varied much over time over the last eight years.
- Providing information about consumer rights, respecting who has access to consumers' information, and the cultural appropriateness of services were top-rated individual questions (over 80% satisfaction).
- A second quality-related scale measures participation in treatment planning with which 63% of adult consumers have been satisfied with consistently over time. However, that means 4 of 10 adults are consistently neutral or unsatisfied about their participation in treatment planning.
- Results from individual questions in the "participation" domain reveal that most adult consumers are satisfied with their ability to ask questions, but fewer agree that they decided on their treatment goals rather than staff.

A summary of caregivers' satisfaction with the quality and appropriateness of their child's treatment include:

- Similar to adults, the highest rated area for youth was related to quality and appropriateness. Satisfaction with the cultural sensitivity of youth services is very high at about 90% and has not changed over time.
- Caregivers were more satisfied (76-78% over the last four years) with participation in treatment planning than adult consumers were with their participation.

Although aspects of the quality of consumers' service experience were rated relatively high, it did not lead to improved functional outcomes for everyone. In 2011, 77% of adult consumers felt satisfied with the quality of their services, but only 60% were satisfied with the functional outcomes of their services. The gap for youth is even greater. In most years, 75% or more of caregivers are satisfied with the cultural sensitivity of services and their participation in treatment planning, but always less than 50% of caregivers are satisfied with the outcomes of their children's services. Although different survey methodologies used by states around the country render comparisons questionable, Wisconsin's rates of satisfaction with these areas of quality are typically 8-12% lower than the national average for both adults and children.⁸⁵

Possible disparities in satisfaction among groups have been examined in different years through special survey samples. In 2007, an oversample of minority racial and ethnic groups revealed no significant differences with Caucasians. In 2009, a special sample of consumers without an SMI/SED also revealed no significant differences with consumers who have an SMI/SED.

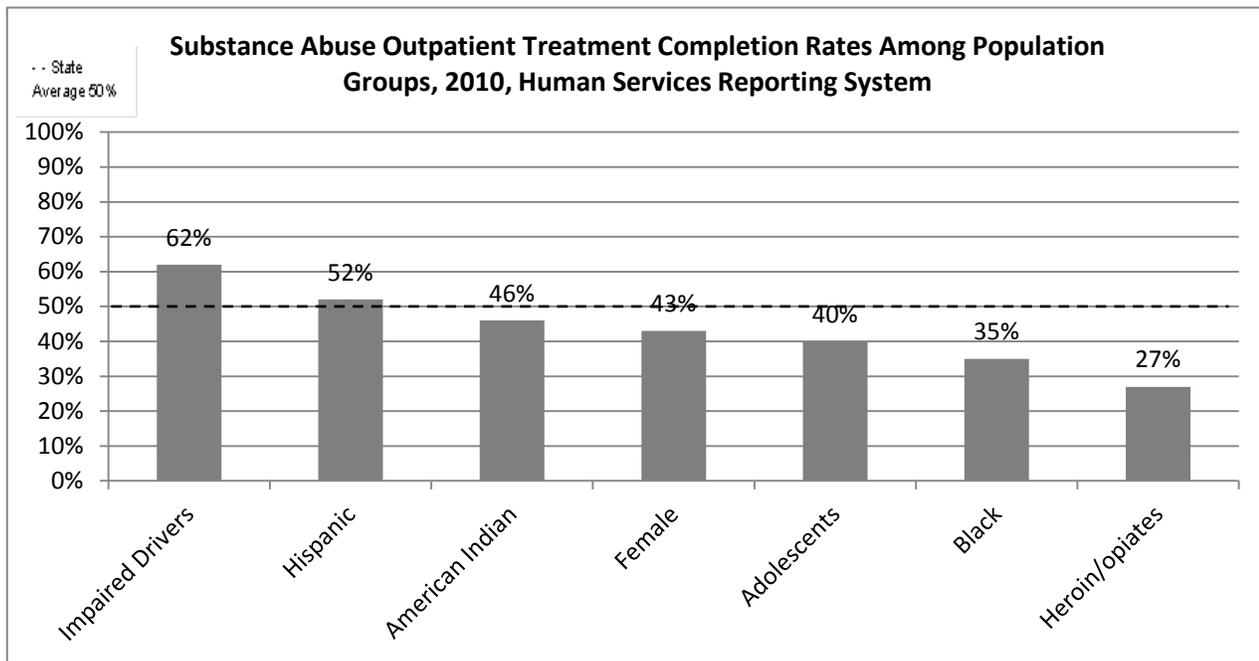
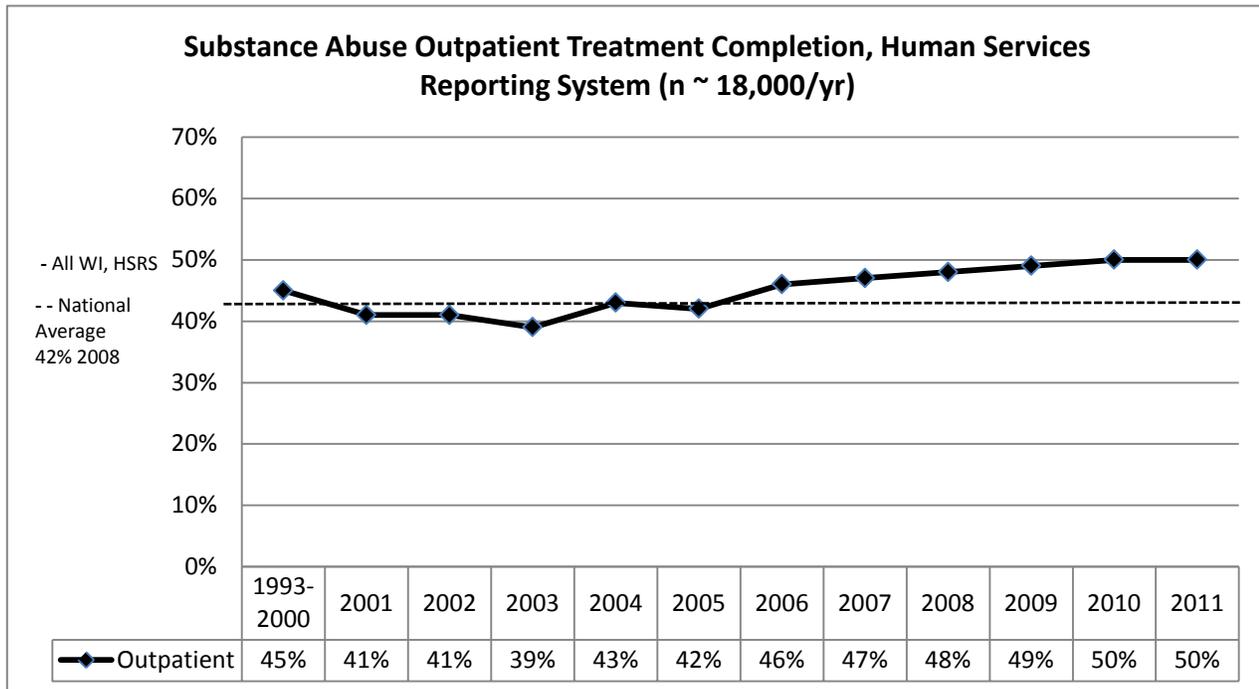
Other Substance Abuse Treatment Quality Indicators

Client satisfaction with services data is also not readily available for Wisconsin's addiction treatment providers although most providers collect and maintain this data in their paper files. National studies in this area generally indicate that 75% of clients have medium or high satisfaction with substance abuse services. However, studies are inconclusive as to whether service satisfaction is correlated with improvements in quality of life, symptoms and functioning.^{86,87}

Three decades of research has demonstrated that substance abuse treatment completion is strongly associated with positive post-discharge social functioning outcomes.⁸⁸⁻⁹⁰ Therefore, one proxy indicator of the quality of services is an analysis of substance abuse treatment completion rates. The chart below tracks Wisconsin outpatient substance abuse treatment completion rates over the past 18 years. The increase seen in 2006 and the years that follow is a result of the STAR-SI quality improvement program which consists of 50 substance abuse

treatment providers pursuing various quality improvement projects. The national outpatient treatment completion average in 2008, depicted by the dashed line, was 42%.

While the overall statewide rate of outpatient treatment completion in Wisconsin exceeds the national average, there are disparities that exist among several population groups for which data are available. Treatment completion rates for African Americans, American Indians, females, adolescents and heroin/opiate abusing clients are below the state average of 50% (dotted line in the following chart).

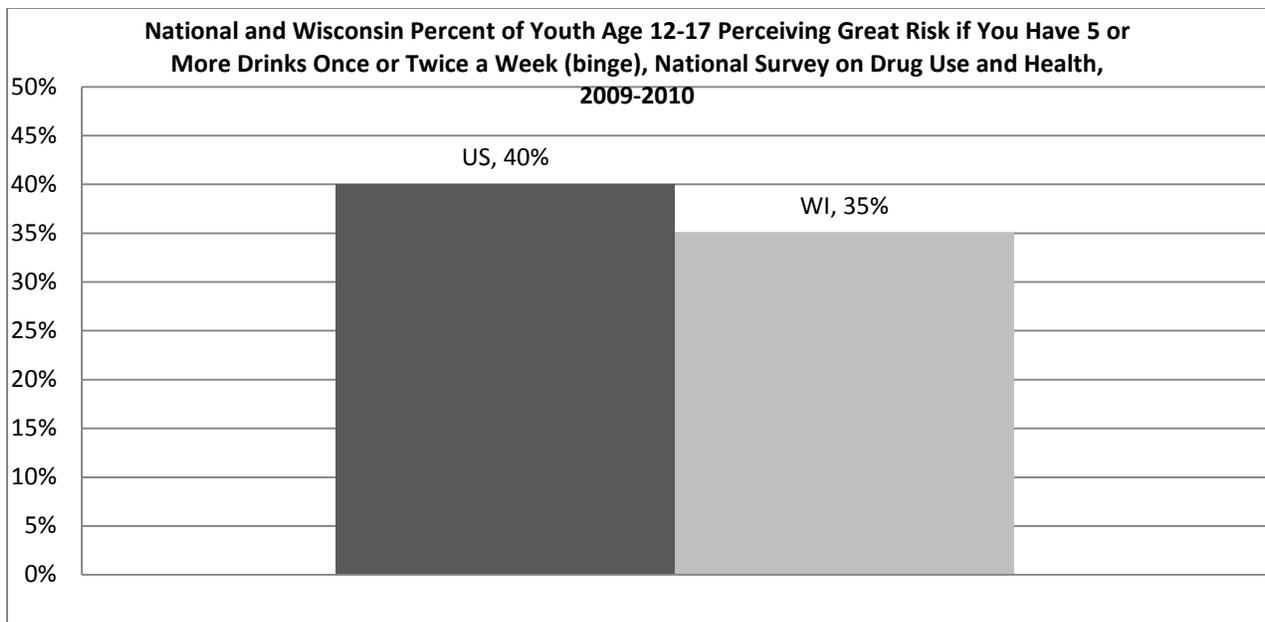


Consumer Outcomes

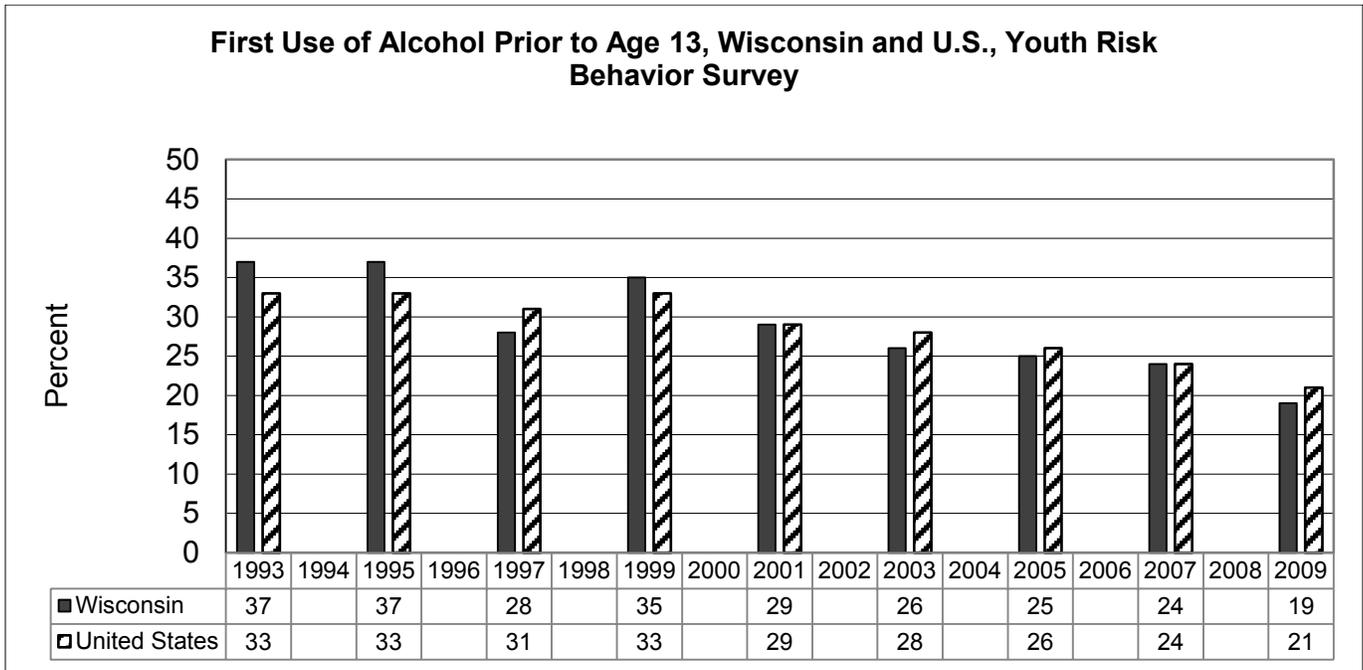
Substance Abuse Prevention

In October 2001, the State of Wisconsin was awarded a three-year, \$9 million Federal grant to reduce the use and abuse of alcohol, tobacco, and other drugs among Wisconsin's 12 to 17 year-old youth. This State Incentive Grant (SIG) operated until December 2005. In November 2002, Wisconsin awarded SIG sub-grants to 17 local coalitions, with the amount of funding proportional to the youth population in the county or tribe. Each sub-recipient coalition's service area covered at least one county or tribal reservation. One of the SIG project's principal objectives was to implement universal, indirect environmental prevention strategies. An evaluation of the project found that local coalition stakeholders reported a dramatic increase in the use of environmental strategies to control youth access to alcohol, including alcohol server training, drinking age enforcement education and alcohol merchant drinking age compliance checks. Use of environmental strategies for tobacco prevention followed the same pattern as did the use of these initiatives for alcohol prevention. The SIG project's impact on youth attitudes and behaviors was mixed, however, and likely due to the influence of factors outside of the project. While youth attitudes toward using alcohol or marijuana changed in a positive direction, their behaviors did not. SIG prevention activities aimed toward parents were positive and demonstrated increased family bonding, more parental involvement with and support of children, improved abilities to set and enforce rules and expectations for behavior, and greater monitoring of children.⁹¹

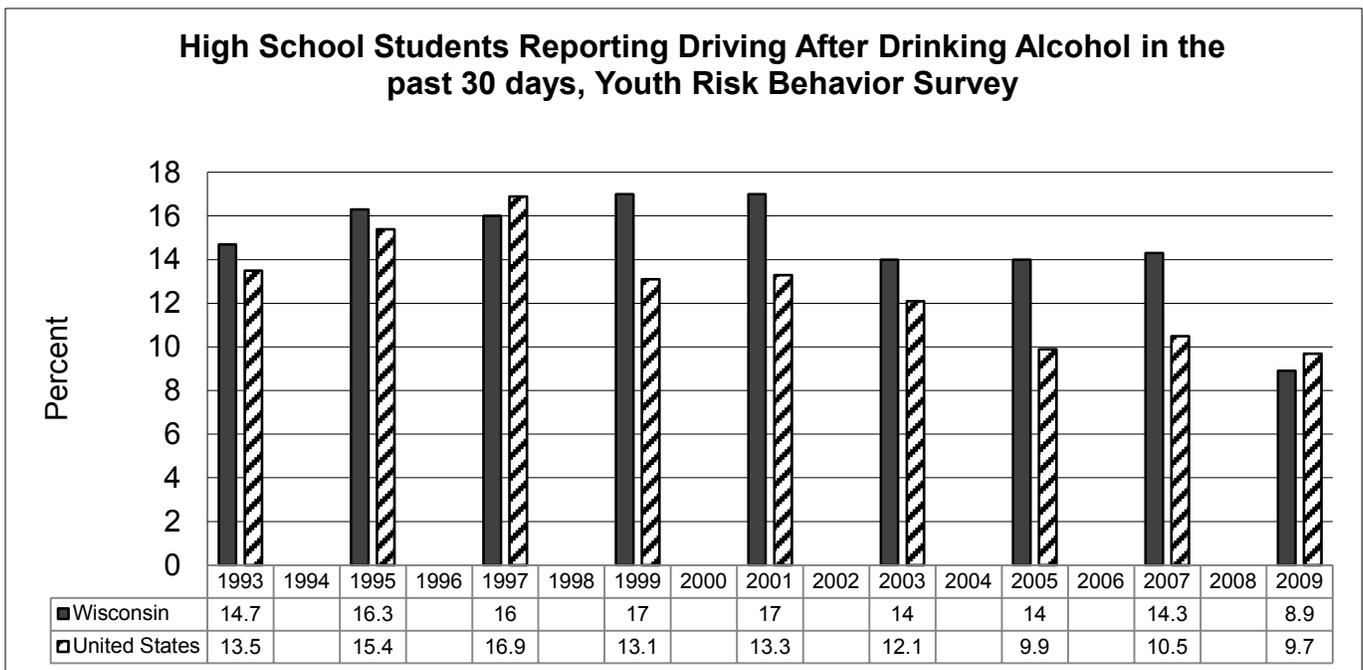
The Federal Substance Abuse and Mental Health Services Administration has identified several state-level indicators of the outcome of prevention activities which are showing positive gains for Wisconsin. While the previously discussed SIG evaluation had mixed results, there are recent signs that things are moving in a positive direction according to statewide data on hazardous binge drinking among youth. In a previous graph, the trend in binge drinking among Wisconsin youth is downward although Wisconsin is still higher than the national average. Accounting for this, the following chart shows Wisconsin below the national average on positive attitudes toward binge drinking. According to the National Survey on Drug Use and Health, 35% of Wisconsin youth perceive great risk or harm in binge drinking once or twice a week versus the national rate of 40%.



The percent of Wisconsin high school-aged youth whose first use of alcohol was before the age of 13 is showing a positive downward trend (see the chart below).



A related prevention outcome indicator is the proportion of high school-aged youth who report driving after drinking alcohol. Obtained from the Youth Risk Behavior Survey, the chart following compares Wisconsin trends with the United States average for the past 15 years. In 2009 not only did the Wisconsin rate of youth drinking and driving go down but it also dipped below the national average for the first time in over 10 years.



Substance Abuse Treatment

An analysis of the rates of treatment completion among persons receiving outpatient substance abuse treatment services in Wisconsin reveals several disparities that exist in treatment completion among selected population groups. While the statewide rate of outpatient substance abuse treatment completion averaged 50% in 2011 in Wisconsin, there are 10 counties with rates well below the state average that should receive follow-up as there may be data collection, coding or service quality issues that need to be addressed.

There is additional Wisconsin outcome data from HSRS, including change in substance use and change in employment status between admission to treatment and discharge. In 2011, based upon data from 19,100 outpatient treatment completers, 72% of treatment completers achieved no substance use by discharge (see table below). There was an 11 percentage point increase in the percent of treatment completers employed by the time discharge occurs.

	Percent of Clients at Admission	Percent of Clients at Discharge	Percentage Point Change
No Alcohol or Drug Use in the Past 30 Days		72%	
Employed	42%	53%	+11 points

Discharge employment rates vary among selected population groups with African American clients having disproportionately lower rates of employment at discharge (see the table below).

	Percent of Clients Employed at Discharge
African American	26%
Native American	42%
Female	45%
Hispanic	56%
State Average All Populations	53%

Mental Health Treatment

In 2011, a total of 21,309 mental health consumers were discharged from the county public system and recorded in HSRS. As a first step in examining the status of consumers at discharge, the discharge reason will be analyzed. Of these discharged consumers, 74% were categorized as having short-term situational needs as opposed to long-term serious needs. These two groups are analyzed separately in the table below to determine if there are differences in their reasons for leaving treatment.

In summary, only slight differences in status at discharge exist between consumers with long-term vs. short-term mental health needs, and much opportunity for improvement in consumer outcomes is available. Overall, 28% of consumers completed their treatment and about 20% completed after experiencing major to moderate change. Just over a quarter of both groups did not complete treatment because they were transferred or referred for further treatment elsewhere. Almost 40% of consumers with long-term needs voluntarily withdrew before completion while slightly fewer (33%) consumers with short-term needs withdrew. Also noteworthy is that consumers with more serious long-term needs were three times more likely to die while in treatment than consumers with short-term needs.

Reasons for Discharging Mental Health Consumers in 2011 (N=21,309)

	Consumers with longer-term service needs	Consumers with short-term situational service needs
Completed with major/moderate improvement	18.8%	21.2%
Completed – no change	6.5%	7.7%
Transferred/referred	26.5%	28.5%
Withdrew before completion	39.1%	33.1%
Funding/auth. Expired	2.3%	3.6%
Incarcerated	1.5%	1.2%
Died	3.4%	1.1%
Other	1.8%	3.6%

Are outcomes better for consumers discharged from CSPs which are the primary programs for consumers with serious mental health needs and based on the evidence-based Assertive Community Treatment model? While the discharge reasons for all consumers in the public system above include CSPs, they comprise a small proportion which is isolated in the results below. CSP outcomes do appear to be slightly better in some cases, but not significantly and not for all reasons. A slightly higher 26% of CSP consumers were discharged after completing treatment with improvements, but a similar percentage of consumers withdrew before completing treatment and a much higher percentage of consumers passed away while being treated in a CSP.

Reasons for Discharge from CSPs in 2011 (N=590)

Reason for Discharge	# of Participants	% of Participants
Improvements in Recovery	154	26%
Consumer Withdrew/ Moved	214	36%
Needed services beyond CSP	82	14%
Death	79	13%
Funding/Authorization Ended	11	2%
Sent to Jail	11	2%
Sent to Prison	6	1%
Other Reason	33	5%

HSRS data for mental health consumers served through the public county system can be used to examine consumer outcome indicators. Data on functional outcomes are collected by counties by design only for consumers with more serious, long-term treatment needs. Outcome indicators examined here include employment status, suicide risk, and living arrangement. Counties are instructed to update the status of these indicators every 6 months as long as a consumer is receiving services. In 2011, a total of 5,276 consumers in the HSRS data were closed, or discharged. To examine changes from enrollment to discharge, complete data is needed at both points. In addition, enrollment and discharge data must be timely. Thus, only outcome indicators that were within 6 months of enrollment and discharge were included in the analysis. After these criteria are applied, the number of discharged consumers with complete and timely enrollment and discharge data is 1,504.

Changes in the outcome indicators from enrollment to discharge are displayed in the table below. Of the three indicators, the reduction in consumers who are a high suicide risk from 2% to 1% is the only positive change. Just over a quarter of consumers were competitively employed at enrollment which may not be unusual. A

slight 1% decrease in the rate of consumers employed at discharge occurred. No change occurred in the percentage of consumers living in a private residence, but the percentage is reasonably high to begin with. Yet, room for improvement exists for this indicator as well.

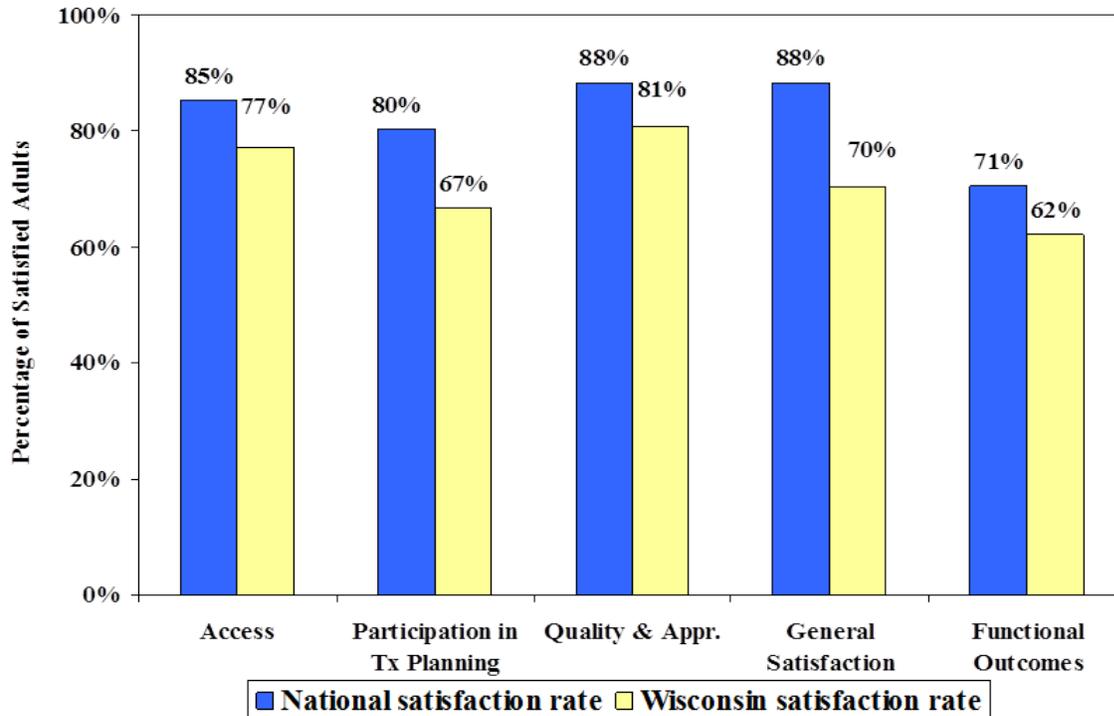
Change in Outcome Indicators for 2011 Discharged Consumers with an SMI

	Percent of Clients at Admission	Percent of Clients at Discharge	Percentage Point Change
Competitively Employed	26.7%	25.4%	-1 points
No high risk of suicide	97.6%	98.5%	+1 points
Living in private residence	85.8%	85.2%	-0.6 points

As discussed in the previous section on the quality of services, the consumer perspective is important to include in analyses as a contrast to provider-collected data which sometimes provides different results. As alluded to earlier, the annual adult and youth satisfaction surveys the DMHSAS conducts include questions about the outcomes of treatment in addition to the quality of services. A succinct way to describe the results is to combine the multiple questions on consumer outcomes into a scale score.

The consistent message from both the adult and youth satisfaction survey results annually is that satisfaction with consumer outcomes is relatively poor. Not only are levels of satisfaction about consumer outcomes lower than satisfaction with other assessed topics such as quality and participation in treatment planning, but levels of satisfaction in Wisconsin are lower than the national average as demonstrated in the chart on the following page. The differences in rates vary from 7% on quality and appropriateness scale to 18% on general satisfaction. However, the fact that Wisconsin’s adult consumers rate functional outcomes the lowest of all topics is not unique. Satisfaction levels with outcomes are the lowest among consumers across the nation as well as in Wisconsin indicating the challenge of improving functional outcomes for consumers even when quality services are provided sometimes. The national comparison of youth data yields the same results for Wisconsin. In fact, caregiver satisfaction levels with the outcomes of their child’s mental health services are some of the lowest in the nation (46% in 2010 and 42% in 2011). Repeating a caution stated before, states’ different survey methodologies can alter the accuracy of comparing consumer satisfaction levels. While this may prevent Wisconsin’s rates from being officially some of the lowest in the nation, it can also mean Wisconsin’s satisfaction rates are relatively low and worthy of follow-up.

Wisconsin and National Adult Satisfaction Levels with Services – 2010



Examining individual survey question results can help elucidate the greatest areas of need. The individual questions that comprise the outcomes and general satisfaction scales for adult and youth are listed on the following page with 2011 survey results. Less than 60% agree that they did better in social situations or at school/work as a result of their mental health services. For youth consumers, caregivers would like to see them get along better with family members more and be able to cope better when things go wrong as a result of mental health services. Forty percent or less of caregivers were satisfied with these two individual questions.

2011 Adult Mental Health Consumers' Satisfaction with Services

	Strongly Disagree	Disagree	Un-decided	Agree	Strongly Agree
GENERAL SATISFACTION WITH SERVICES					
I like the services that I received.	4%	7%	10%	43%	37%
If I had other choices, I would still get services from this agency.	8%	6%	13%	35%	38%
I would recommend this agency to a friend or family member.	6%	6%	13%	37%	38%
OUTCOMES					
I deal more effectively with daily problems.	3%	7%	18%	47%	24%
I am better able to control my life.	4%	9%	18%	44%	25%
I am better able to deal with crisis.	5%	9%	22%	42%	22%
I am getting along better with my family.	4%	11%	16%	43%	26%
I do better in social situations.	4%	14%	22%	40%	19%
I do better in school and/or work.	5%	14%	26%	35%	20%
My housing situation has improved.	7%	11%	19%	42%	22%
My mental illness symptoms are not bothering me as much.	6%	15%	18%	42%	20%

2011 Youth Mental Health Consumer Caregivers' Satisfaction with Services

	Strongly Disagree	Disagree	Un-decided	Agree	Strongly Agree
GENERAL SATISFACTION WITH SERVICES					
Overall, I am satisfied with the services my child received.	3%	9%	15%	48%	26%
The people helping my child stuck with us no matter what.	4%	6%	15%	39%	37%
I felt my child had someone to talk to when he/she was troubled.	3%	11%	18%	39%	29%
The services my child and/or family received were right for us.	1%	3%	6%	49%	41%
My family got the help we wanted for my child.	5%	12%	22%	38%	23%
My family got as much help as we needed for my child.	6%	16%	26%	31%	21%
IMPROVEMENT IN FUNCTIONING					
My child is better at handling daily life.	4%	18%	27%	36%	16%
My child gets along better with family members.	5%	17%	36%	27%	14%
My child gets along better with friends and other people.	2%	14%	29%	42%	13%
My child is doing better in school and/or work.	5%	19%	19%	38%	19%
My child is better able to cope when things go wrong.	5%	21%	31%	22%	10%
My child is better able to do things he or she wants to do.	2%	18%	25%	45%	10%

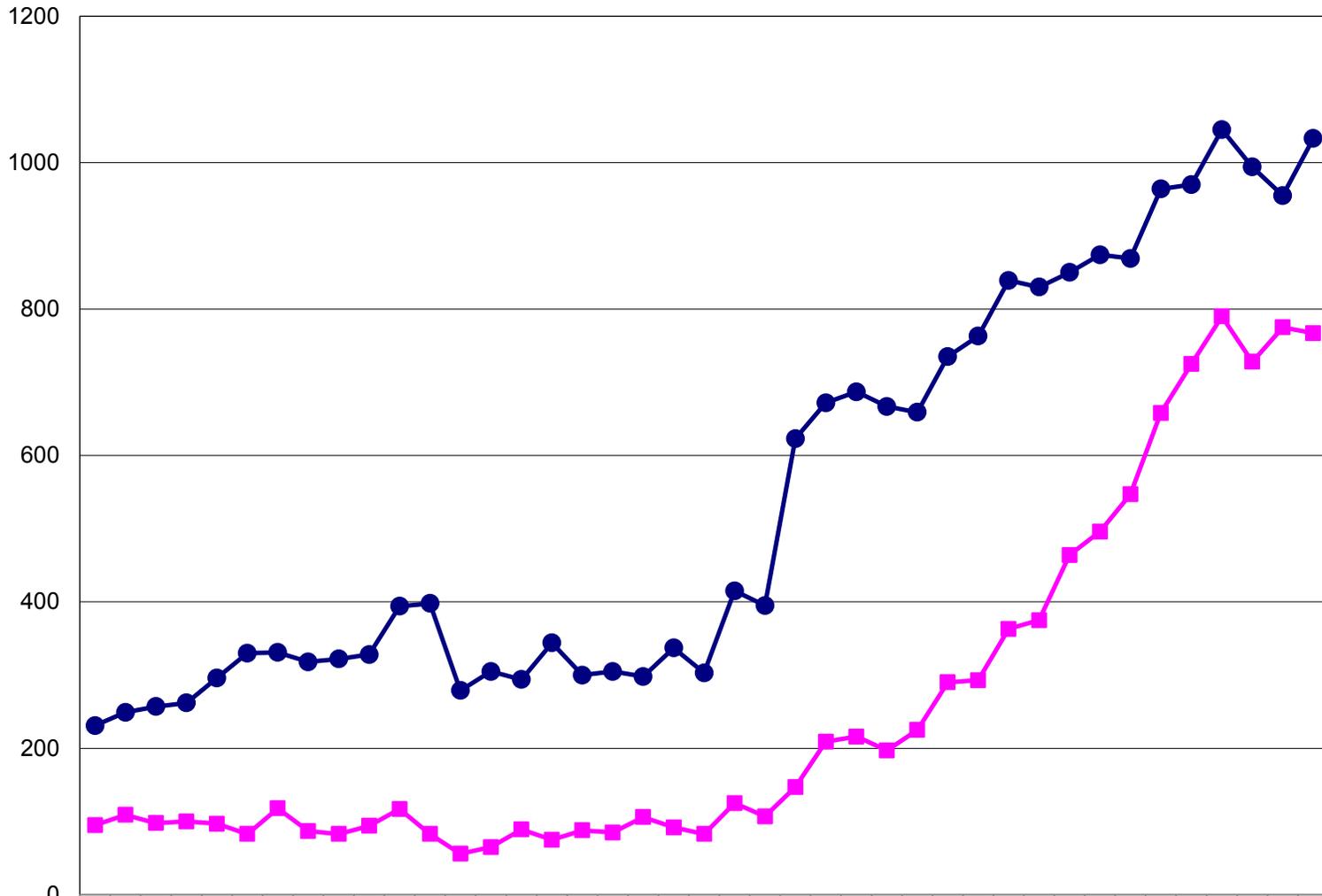
Impact

Substance Abuse

Some of the available substance abuse data indicators can be used to assess the overall performance of Wisconsin's substance abuse prevention and treatment system. Surveys indicate that adult substance use disorder prevalence may be declining recently, but the percent of Wisconsin residents having a substance use disorder is still above the national average and it is above the Wisconsin rate from 10 years ago. For youth, the rate of substance use disorders has been relatively flat for the past 10 years and it too is above the national average. Hazardous binge drinking is trending downward for adults and youth while marijuana use among youth in the past 15 years is up though the Wisconsin rate of marijuana use is below the national average. Tobacco use among youth is trending downward.

The average age of Wisconsin deaths due to excessive alcohol consumption is about 56 according to death certificate data.⁹² Alcohol-related conditions cited on death certificates that can precipitate early death include alcohol dependency, alcohol abuse, alcoholic cardiomyopathy, alcoholic hypertension, cirrhosis of the liver, pancreatitis, a lethal blood alcohol level and suicide. Mood-altering drug deaths include deaths where the death certificate cites a controlled, habit-forming drug such as heroin, other prescription opiates, cocaine, methamphetamine, marijuana, hallucinogens or prescription tranquilizers, barbiturates or stimulants were an underlying cause of death. Drug deaths exclude overdoses related to aspirin, anti-depressants and other non-habit-forming medicines and substances. Obtained from the Wisconsin Office of Health Informatics, the figure below tracks Wisconsin alcohol and mood-altering drug deaths over the past 40 years. While there has been some leveling off of these deaths recently, the overall long-term trend is upward.

ALCOHOL AND MOOD-ALTERING DRUG POISONING AND ABUSE DEATHS, WISCONSIN DEATH CERTIFICATES

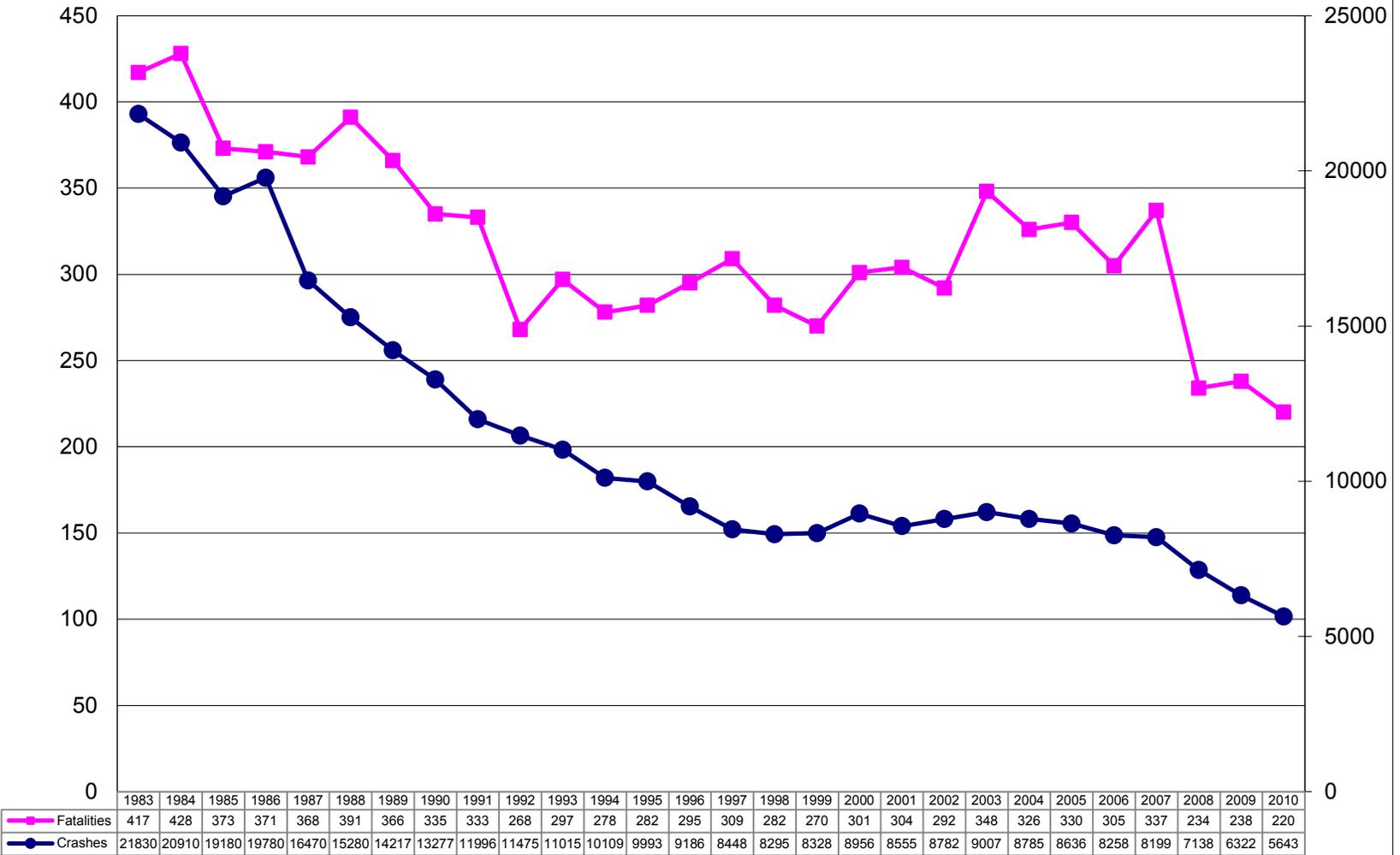


Operating a motor vehicle under the influence of alcohol or other mood-altering drugs is a public safety issue causing injuries and deaths. The National Survey on Drug Use and Health (2004-2006) found that Wisconsin was the highest state in the country in self-reported driving under the influence with 26% of adult Wisconsin survey respondents reporting this behavior. The national average was 15%. The chart following presents over 25 years of Wisconsin traffic crash and fatality data from the Wisconsin Department of Transportation.⁹³ Since 2008, after years of slight increases, the annual number of crashes and fatalities is again trending downward.

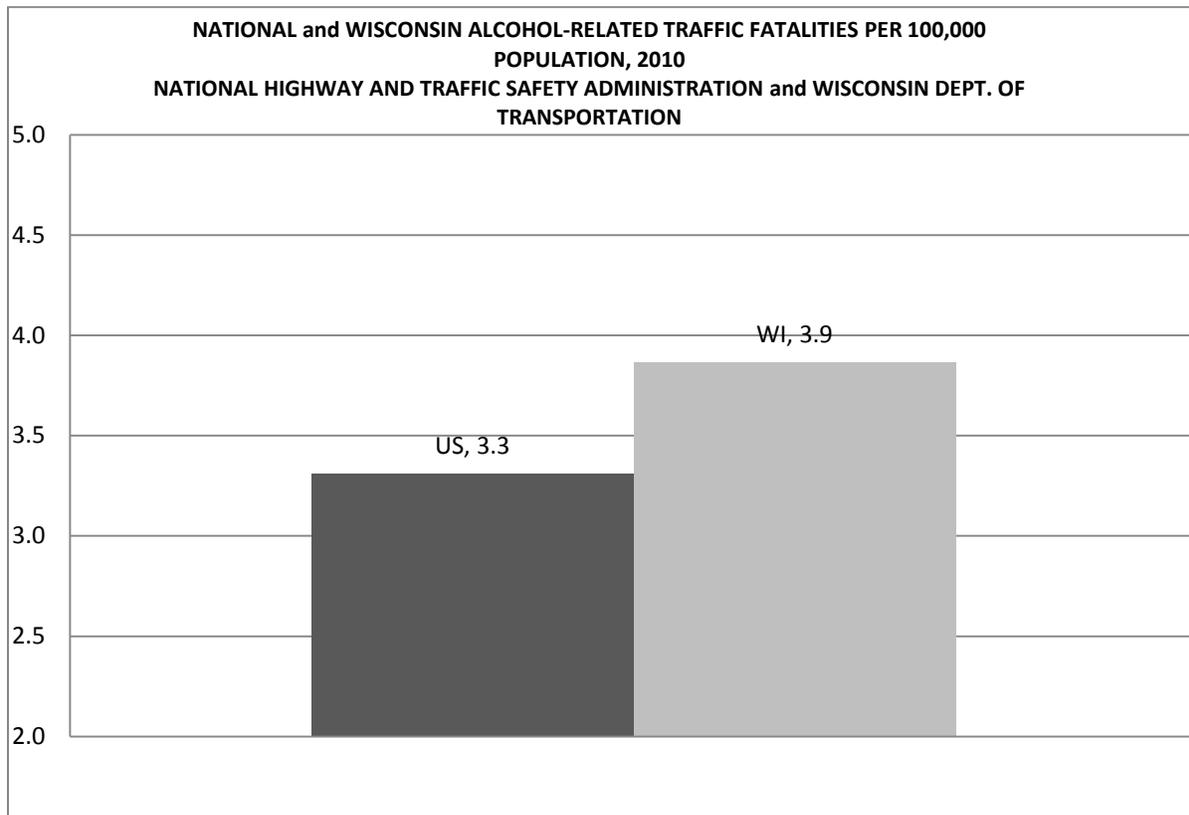
Fatalities

WISCONSIN ALCOHOL-RELATED TRAFFIC CRASHES AND FATALITIES, DEPT. OF TRANSPORTATION

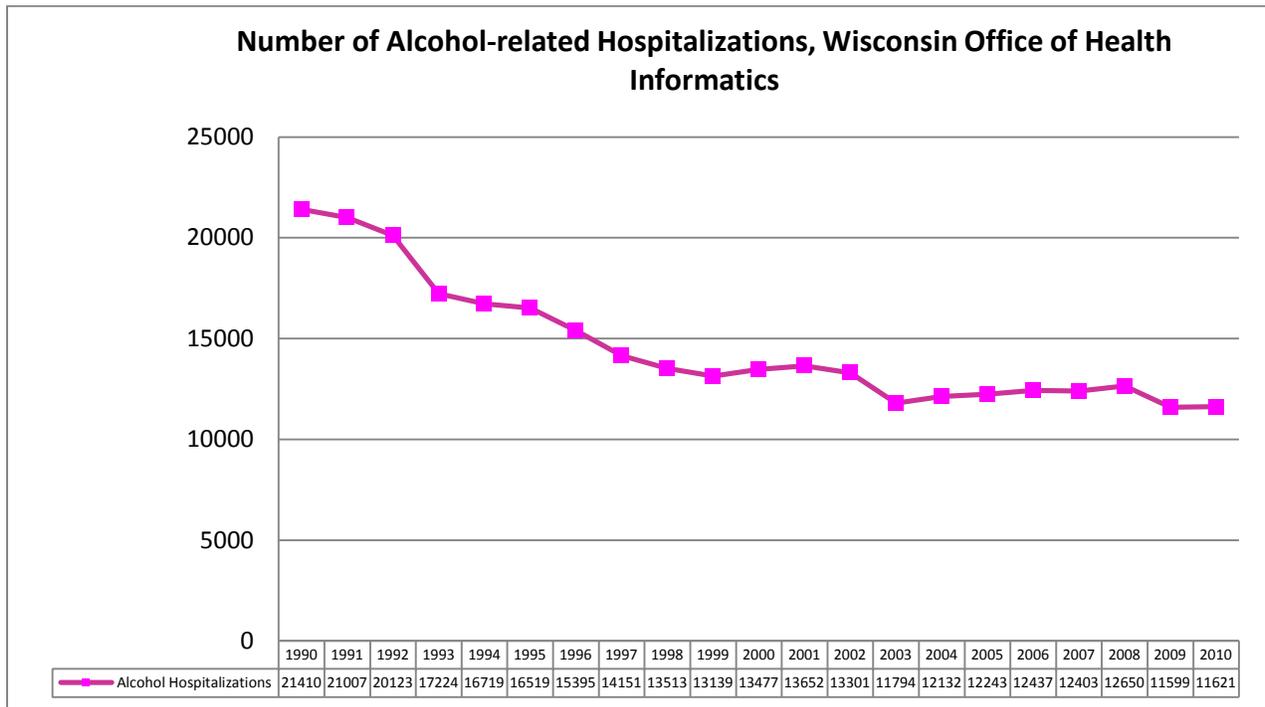
Crashes



Wisconsin alcohol-related traffic deaths are higher than the national average. After converting the data to number of deaths instead of deaths per 100,000, the next chart on U.S. and Wisconsin alcohol-related traffic fatalities shows that Wisconsin has 32 more alcohol-related traffic crash fatalities each year than would have occurred if Wisconsin's rate were the same as the national rate.⁹⁴



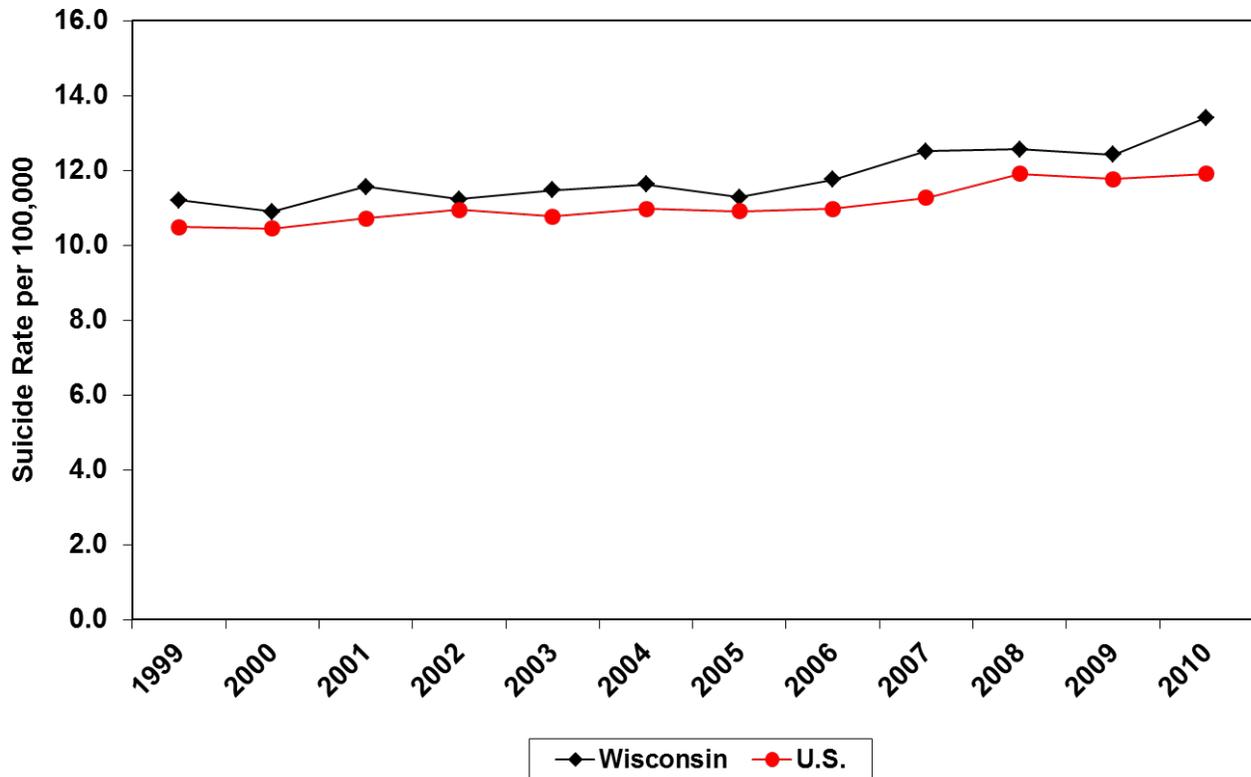
Like deaths, alcohol-related hospitalizations are also an important tracking indicator of the impact of the substance abuse services system on substance abuse and related illness and disease. The reported data for alcohol-related hospitalizations were obtained from hospital inpatient discharge data collected by the Wisconsin Hospital Association Information Center.⁹⁵ These hospitalizations include the same conditions as the death data (i.e., alcohol dependency, alcohol abuse, alcoholic cardiomyopathy, etc.) and do not include emergency department cases. Alcohol-related hospitalizations have leveled off in recent years after declines during the decade of the 1990s.



Mental Health

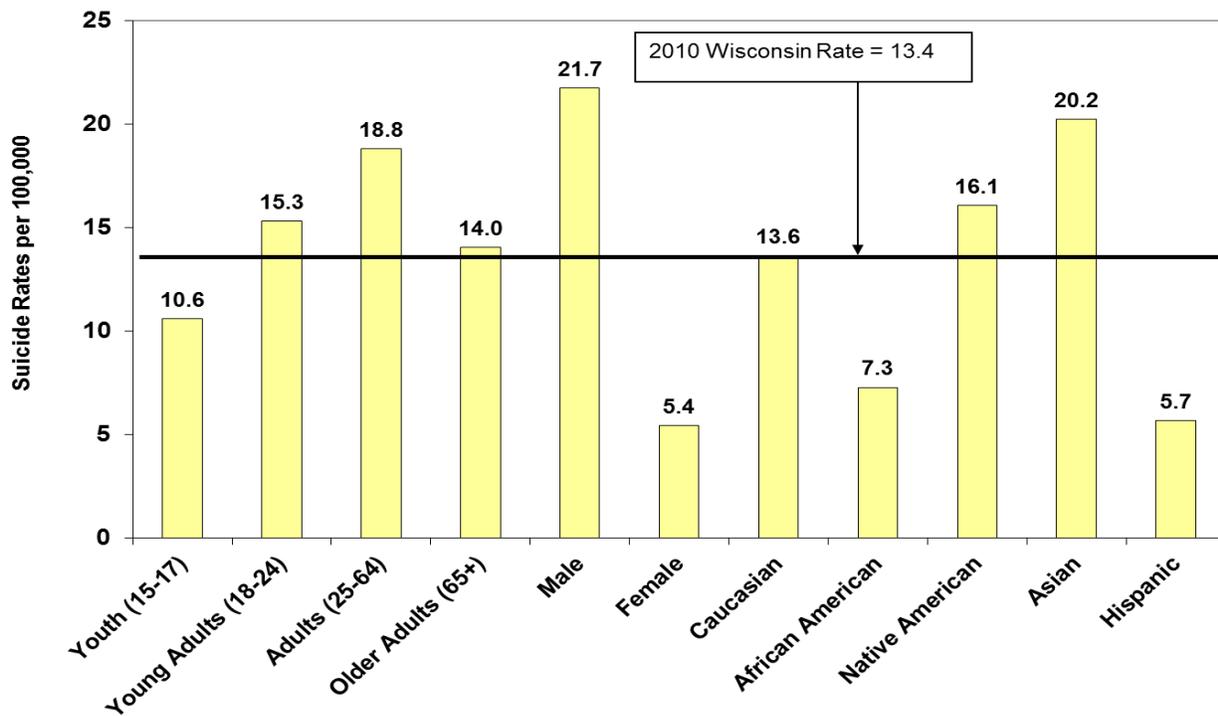
Of the impacts on the general population related to mental health disorders, one of the most severe impacts is through suicides. In 2010, the total number of suicides in Wisconsin was 791 which is a rate of 13.4 per 100,000 people⁹⁶. The trend in suicide rates from 1999-2010 is displayed in the chart below and indicates a gradual rise in the rate since 2005. From 1999-2005, the suicide rate did not change much from 11.2 to 11.3 respectively. But from 2005-2010, the suicide rate increased by two points per 100,000 from 11.3 to 13.4 with a one point increase occurring in 2010 alone. The national rate⁹⁷⁻⁹⁹ has consistently been below Wisconsin's by less than a point except for in 2010 when the gap widened to 1.5 due to the increase in Wisconsin's rate.

Wisconsin and U.S. Suicide Rates 1999-2010



The chart below demonstrates suicide rates for different demographic groups. From 2006-2010 in Wisconsin, 79% of suicides were committed by males. The highest suicide rate is for adults ages 25-64. However, the smaller group of adults deserving attention are 50-59 year olds. While suicide rates for many age groups have varied slightly over 2006-2010, the only rate that has steadily risen is for people ages 50-59. Further illustrating the high risk of suicide in this age group is the fact that 45-59 year olds commit the highest rate of suicides at about 22 per 100,000 in 2010. For racial and ethnic groups in Wisconsin, Caucasians commit 92% of suicides in Wisconsin which is disproportionately high relative to their 88% share of the population. The numbers of suicides in non-Caucasian groups is often too small to show reliable trends. However, the number of suicides for Asians should be monitored closely into the future because it tripled from 7 to 21 from 2009-2010.

Suicide Rates for Wisconsin Demographic Groups (2010)



While more recent data on suicide among veterans is not yet available, *The Burden of Suicide in Wisconsin* report showed that between the years of 2001 and 2006, veterans and/or active duty military service personnel accounted for about a fifth of all suicides¹⁰⁰. As age increases, the proportion of suicides committed by veterans exponentially increases. In fact, amongst those ages 65-74, veterans made up about half of the suicide deaths between 2001 and 2006.

Economic Impact

Substance abuse in general causes an economic impact in Wisconsin that is both positive and negative. From a synthesis of 21 substance abuse treatment cost-benefit studies, when substance abuse is treated, each dollar spent on treatment results in a \$6.35 return to Wisconsin in increased employment earnings, reduced health care costs, and reduced costs of crime.¹⁰¹ From a synthesis of 14 substance abuse prevention cost-benefit studies, for each dollar invested in substance abuse prevention, an average benefit of \$7.65 is realized in reduced health care and social services costs, reduced public assistance, reduced crime costs and increased potential earnings.¹⁰² However, unaddressed substance abuse exacts an economic toll of over \$3 billion on Wisconsin's \$230 billion annual economy (U.S. Department of Commerce, Bureau of Economic Analysis) in terms of health care, crime, traffic crash, public assistance and lowered work productivity costs.¹⁰³

According to the federal Centers for Disease Control, binge drinking accounts for more than 40,000 deaths each year across the country, including homicide, impaired driving, suicide, heart disease and liver failure, \$167.6 billion in economic costs (\$3 billion Wisconsin projection from personal income data), and 1.5 million years of potential life lost.^{104, 105}

The estimated societal cost of opiate abuse in the United States is \$25 billion in excess health care costs and an additional \$31 billion in criminal justice, public assistance and lowered productivity costs (\$1 billion Wisconsin projection).¹⁰⁶

According to the National Highway and Traffic Safety Administration, the medical, legal, productivity, and property cost per traffic fatality is estimated at \$1.1 million.¹⁰⁷ For the 220 Wisconsin alcohol-related traffic fatalities that occurred in 2010, the cost is over \$240 million.

The annual cost to society associated with depression has been estimated at \$30 billion to \$44 billion in the U.S. annually (\$800 million Wisconsin projection)¹⁰⁸. Similarly, the total annual cost associated with schizophrenia in the United States has been estimated at \$62.7 billion (\$1 billion Wisconsin projection)¹⁰⁹. These estimates include direct costs such as treatment and medication, criminal justice system costs, and capital costs for mental health facilities, along with indirect costs such as loss of productivity in the workplace for clients and their family members.

Other Stakeholder Input About Service Needs

Consumers and Consumer Advocates

Input from consumers and consumer advocates was obtained through a survey asking about the most important unmet needs, populations and service improvements that should be addressed. In addition, the United We Stand Wisconsin Network of the Grassroots Empowerment Project (a state-wide organization controlled and directed by mental health consumers/survivors whose purpose is to help people labeled with a mental illness exercise power in their lives) conducted a listening session among consumers/survivors. Their most important needs are as follows in no particular order:

- Healthcare
- Prevent mental health hospitalizations
- More consumer-run support groups or centers
- More Peer Specialists
- Prevent or provide mental health services for persons who come in contact with the criminal justice system
- Address stigma and discrimination
- Protect or increase public funding for mental health services
- Affordable public or private health insurance

Tribal Nations

Wisconsin's eleven Tribal Nations provided input through the above-mentioned survey as well as listening sessions conducted during 2012. Their most important needs are:

- Shortage of mental health and substance abuse professionals, in-home services and services in general
- Community awareness, education and prevention of mental health and substance use conditions
- Protect or increase public funding for mental health and substance abuse services; Medicaid reimbursement for case management and traditional tribal healing methods and other funding-related issues
- Training for mental health and substance abuse professionals
- Transitional housing
- Integrated services for co-occurring mental health and substance use disorders

Report-derived Problems, Issues, and Gaps Needs Prioritization Process

This needs assessment report presents a multitude of data-driven problems, issues, needs and gaps. The needs assessment is intended to inform the Wisconsin Community Mental Health Services and Substance Prevention and Treatment plan.

The below priority areas were selected via a review process with stakeholders. A tool based on a public health program priority rating model¹ (Appendix A) was developed for stakeholders to more objectively rate and rank the needs identified through this needs assessment report. To be equitable to both the mental health and substance abuse fields and to both the prevention and treatment approaches, it was decided to group the needs or issues into three categories, namely (1) prevention and treatment needs common to mental health and substance abuse, (2) mental health prevention and treatment needs, and (3) substance abuse prevention and treatment needs. The table below presents the rated and ranked priorities which informed the Community Mental Health Services and Substance Prevention and Treatment plan objectives, strategies and performance indicators

Score	Item	Item Description
81.2	SA-2	Reduce substance use disorders for pregnant women and mothers with infants and young children.
79.9	MHSA-3	Increase children and youth who receive effective treatment and wrap-around services for mental health or substance use disorders. Youth have high rates of mental health and substance abuse needs.
79.6	MH-1	Increase psychiatrist availability, including, but not limited to, child psychiatrists in northern Wisconsin.
77.7	MHSA-4	Increase persons coming in contact with the criminal justice system that receive effective services for mental health or substance use disorders. These persons have high prevalence rates.
77.4	MH-2	Reduce Wisconsin's suicide rate below the national average, including, but not limited to, persons age 50-59, veterans and active service members.
77.0	SA-8	Reduce alcohol and other substance-impaired motor vehicle crashes, injuries and fatalities among persons age 16-34.
75.8	MHSA-11	Improve mental health and substance abuse service outcomes and quality of care by addressing the use of evidence-based practices and treatments, practice-based evidence, consumer satisfaction and involvement, professional training, data collection, outcomes measurement, quality improvement approach, etc.
75.0	SA-1	Increase the substance abuse treatment professional workforce statewide.
74.4	MH-4	Early identification of those who have experienced adverse childhood experiences such as abuse, divorced parents, or living with persons who have a mental health or substance use disorder coupled with proven interventions to build resilience.
74.3	MHSA-6	Address barriers to accessing mental health or substance abuse treatment, including cost, motivation, transportation/distance, living in rural areas, and stigma in order to increase the number of persons receiving treatment.
73.9	SA-7	Reduce binge or heavy-occasion use of alcohol among persons age 18-34.
73.9	SA-6	Reduce use of alcohol among persons age 12-20.
73.3	SA-3	Reduce persons with addictions to prescription pain killers and heroin as well as overdoses and deaths among persons age 12 and older.
72.1	MHSA-1	Increase persons with any co-occurring mental health or substance use disorder who receive effective integrated treatment.

Score	Item	Item Description
72.0	MHSA-8	Increase overall mental health and substance abuse workforce capacity and reduce waiting lists.
71.2	MHSA-9	Achieve mental health and substance abuse service appropriateness and equity by ensuring the appropriate mix of inpatient, detox, residential, intensive outpatient, outpatient, psychosocial rehabilitation services, crisis intervention, recovery support services, peer specialists, recovery coaches, consumer-run centers, narcotic treatment, etc.
70.6	MHSA-12	Reduce the disparities in access to effective, culturally and linguistically competent mental health and substance abuse services among populations of differing races, ethnicities, sexual orientations and Deaf persons.
69.9	SA-5	Increase capacity to provide evidence-based, universal indirect environmental prevention strategies in areas of the state where data indicates there is need, including, but not limited to, rural villages and towns.
69.8	MHSA-5	Increase young adults (age 18-25) and elders (age 60 and over) who receive effective treatment for mental health or substance use disorders. Young adult prevalence rates are higher than average and both groups' rates of receiving treatment are lower than average.
69.1	MH-3	Reduce mental health inpatient readmission rates by increasing the availability of community-based alternatives.
68.8	MHSA-2	Increase veterans, active service members and military families who receive effective treatment for mental health or substance use disorders.
67.1	SA-4	Reduce high usage of detoxification services in areas where usage exceeds the state or national average.
66.6	MHSA-10	Collaboration or integration of substance abuse and mental health services with primary health care to improve overall health outcomes, including, but not limited to, smoking cessation.
63.0	MH-5	Provide parents and helping professionals working with infants and young children (e.g., child care workers, home visitors, and pediatricians) the knowledge, skills, and practices that support healthy social and emotional child development.
55.3	SA-9	Reduce the use of synthetic drugs that have a similar effect as marijuana (spice) or stimulants (bath salts).
51.9	MHSA-7	Address access barriers to pathological gambling disorder treatment in order to increase the number of persons receiving treatment.

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APPENDIX A

2012 Mental Health and Substance Abuse (Behavioral Health Assessment and Plan) Needs Rating Sheet

Rate the need on each of the 8 criteria below using the rating scales provided. Just one number can be entered in the Rating column for each of the 8 criteria.

Need: _____

Criteria	Rating
<p>1. The physical and emotional health and functioning impact (illness, injury, disease, disability, death) on the individual, family or affected others.</p> <p>Mild/Low: 1 2 3 4 5 6 7 8</p> <ul style="list-style-type: none"> • Mild or no impact on overall emotional well-being or physical condition • Permanent disability unlikely, with mild or no impact on ability to perform major social roles (e.g., work, school, parenting, family relationships) • Chronic medical condition or serious injury unlikely (low risk) • Low need for medical, mental health or substance abuse services (education; short-term ambulatory situational care or services) <p>Moderate/Medium: 9 10 11 12 13 14 15 16</p> <ul style="list-style-type: none"> • Moderate impact on overall emotional well-being or physical condition • Permanent disability unlikely with moderate impact on ability to perform major social roles (e.g., work, school, parenting, family relationships) • Early or premature (before age 65) death unlikely (low risk) but chronic medical condition or serious injury likely (moderate risk) • Moderate need for medical, mental health or substance abuse services (long-term low intensity ambulatory and/or short-term 24-hour situational care or services) <p>Severe/High: 17 18 19 20 21 22 23 24</p> <ul style="list-style-type: none"> • Severe impact on overall emotional well-being or physical condition • Permanent disability very likely (high risk) with severe impact on ability to perform major social roles (e.g., work, school, parenting, family relationships) • Early or premature (before age 65) death likely (high risk) • High need for medical, mental health or substance abuse services (long-term high intensity ambulatory and/or long-term 24-hour care or services) 	<p>_____ (1-24)</p>
<p>2. The negative financial or economic impact (e.g., cost of health/medical/mental health/substance abuse/social or other special services or care or treatment, criminal justice system or public assistance; cost to employers; or loss of income) on the individual, family or society or addressing the need successfully will result in a positive cost-benefit to society.</p> <p>Mild/Low: 1 2 3 4 5 6</p> <ul style="list-style-type: none"> • Low negative financial impact on the individual, family or society and low financial or economic costs or losses • Addressing the need successfully will result in a low positive financial impact on the individual or family and a low financial or economic benefit to society <p>Moderate/Medium: 7 8 9 10 11 12 13</p> <ul style="list-style-type: none"> • Moderate negative financial impact on the individual, family or society and moderate financial or economic costs or losses • Addressing the need successfully will result in a moderate positive financial impact on the individual or family and a moderate financial or economic benefit to society 	<p>_____ (1-20)</p>

<p>Severe/High: 14 15 16 17 18 19 20</p> <ul style="list-style-type: none"> • The financial burden on the individual, family or society is severe causing extreme financial hardship or economic costs or losses • Addressing the need successfully will result in a documented, very beneficial financial impact on the individual or family and high financial or economic benefit to society 	
<p>3. Know-how, evidence-based practice, a service, a program or a strategy and the resources to effectively address the need or there are service quality, outcome or consumer satisfaction issues.</p> <p>Mild/Low: 1 2 3 4 5</p> <ul style="list-style-type: none"> • Evidence-based practice or strategy not available and little know-how to effectively address the need • There is little consensus about the approach or strategy to address the need • The financial resources are not available to address the need • Service quality, outcome or consumer satisfaction is good <p>Moderate/Medium: 6 7 8 9 10</p> <ul style="list-style-type: none"> • There is an evidence-based practice or strategy available or know-how to address the need • There is moderate agreement on the approach or strategy to address the need • The financial resources may become available to implement the approach or strategy to address the need • Service quality, outcome or consumer satisfaction problems are moderate <p>Severe/High: 11 12 13 14 15 16</p> <ul style="list-style-type: none"> • There is an evidence-based program, service or strategy in place to address the need • There is good consensus on the approach or strategy to address the need • The financial resources are sufficient to address the need • There are major service quality, outcome or consumer satisfaction problems 	(1-16)
<p>4. Comparison to the national average or other accepted benchmark.</p> <p>Mild/Low: 1 2 3 4 The need is consistently slightly (less than 5%) worse than the national average or other accepted benchmark</p> <p>Moderate/Medium: 5 6 7 8 The need is consistently moderately (5% to 9%) worse than the national average or other accepted benchmark</p> <p>Severe/High: 9 10 11 12 The need is consistently significantly (10% or more) worse than the national average or other accepted benchmark</p>	(1-12)
<p>5. The size, magnitude, volume or occurrence of the need or there are significant service/strategy access issues such as availability, capacity or wait time.</p> <p>Mild/Low: 1 2 3</p> <ul style="list-style-type: none"> • Fewer than 5,000 persons are affected (less than 0.1% of the population) or • Access, availability or capacity issues or wait time are minimal or nonexistent <p>Moderate/Medium: 4 5 6 7</p> <ul style="list-style-type: none"> • 5,000 to 99,999 persons are directly affected (0.1% to 1.9% of the population) or • Access, availability or capacity issues or wait time are moderate 	(1-10)

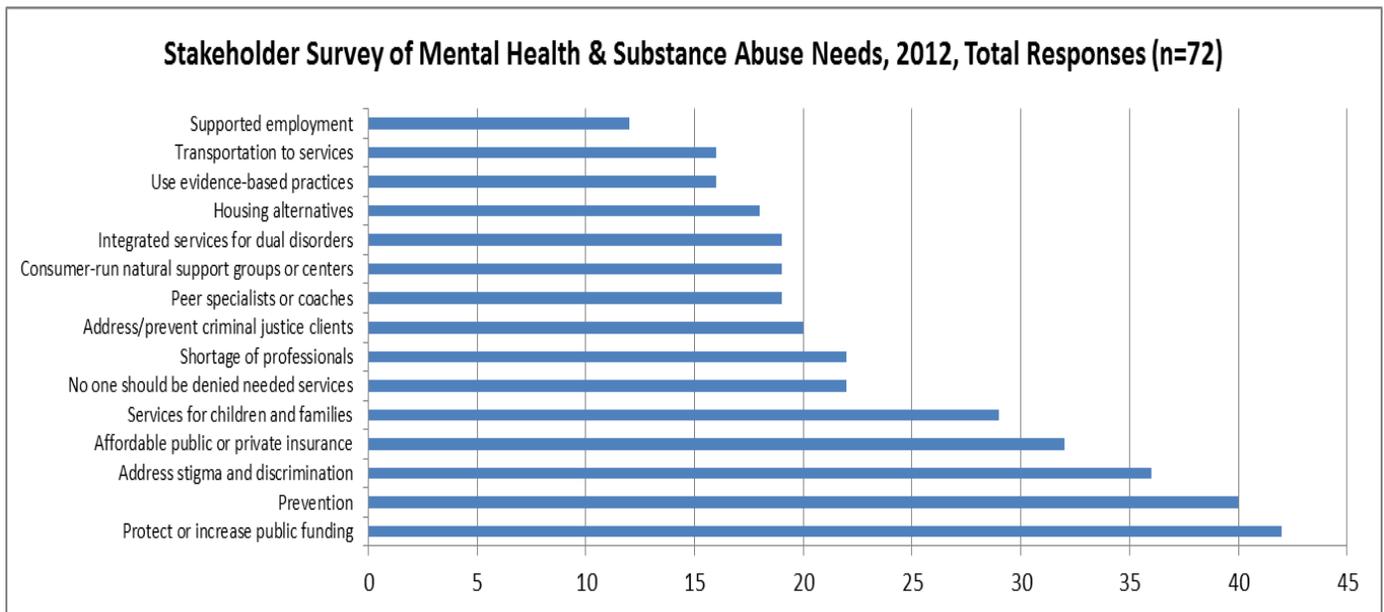
<p>Severe/High: 8 9 10</p> <ul style="list-style-type: none"> • 100,000 or more persons are directly affected (2% or more of the population) or • Access, availability or capacity issues or wait time are significant 	
<p>6. Consumers, consumer advocacy groups and other stakeholders have identified the need as a priority and/or will be involved in addressing the need.</p> <p>Low: 1 2</p> <ul style="list-style-type: none"> • Consumers, consumer advocacy groups and other stakeholders have not identified the need as a priority or • Consumers, consumer advocacy groups and other stakeholders will not be directly involved in planning or implementation <p>Medium: 3 4 5</p> <ul style="list-style-type: none"> • Consumers, consumer advocacy groups and other stakeholders have identified the need as medium priority or • Consumers, consumer advocacy groups and other stakeholders will be somewhat involved in planning or implementation <p>High: 6 7 8</p> <ul style="list-style-type: none"> • Consumers, consumer advocacy groups and other stakeholders have identified the need as a high priority or • Consumers, consumer advocacy groups and other stakeholders will be directly involved in planning or implementation 	(1-8)
<p>7. The need shows a negative trend over time.</p> <p>Mild/Low: 1 2 The need shows a consistent positive trend over time</p> <p>Moderate/Medium: 3 4 The need shows a consistent stable or inconsistent trend over time</p> <p>Severe/high: 5 6 The need shows a consistent negative trend over time</p>	(1-6)
<p>8. Federal or state government has officially identified the need as a high priority.</p>	(1-4)
<p>Low: 1 The Federal or State government has not officially identified the need as a priority or it is a low priority</p>	
<p>Medium: 2 The Federal or State government has officially identified the need as a medium priority</p>	
<p>High: 3 4 The Federal or State government has officially identified the need as a high priority</p>	
TOTAL	

Comments:

APPENDIX B

Stakeholder Survey of Mental Health and Substance Abuse Needs, 2012

	Consumers or Consumer Advocates n=28	County Agency Staff n=20	Private Providers n=11	Tribal Agency Staff n=8	Veterans n=5	TOTAL
Protect or increase public funding	21	13	2	5	1	42
Prevention	11	16	8	3	2	40
Address stigma and discrimination	24	6	2	2	2	36
Affordable public or private insurance	15	8	7	0	2	32
Services for children and families	9	10	9	0	1	29
No one should be denied needed services	14	3	5	0	0	22
Shortage of professionals	12	2	5	2	1	22
Address/prevent criminal justice clients	14	4	2	0	0	20
Peer specialists or coaches	15	1	2	1	0	19
Consumer-run natural support groups or centers	7	6	4	1	1	19
Integrated services for dual disorders	4	5	7	3	0	19
Housing alternatives	10	5	2	0	1	18
Use evidence-based practices	8	1	6	1	0	16
Transportation to services	5	7	0	2	2	16
Supported employment	10	2	0	0	0	12
72 Responses from a total of 32 Counties						
The vast majority of respondents chose to comment on both mental health & substance abuse						
Bolded needs are also a priority of the United We Stand Wisconsin network of the Grassroots Empowerment Project; health care received (8) responses; preventing hospitalizations (7)						



APPENDIX C

Measuring Mental Health Needs

Wisconsin SMI Definition

Wisconsin has used the following definition to identify its adult population with serious and persistent mental illness. Wisconsin State Statutes define chronic serious and persistent mental illness in section 51.01(3g) as:

"Chronic serious and persistent mental illness" means a serious and persistent mental illness which is severe in degree and persistent in duration, which causes a substantially diminished level of functioning in the primary aspects of daily living and an inability to cope with the ordinary demands of life, which may lead to an inability to maintain stable adjustment and independent functioning without long-term treatment and support and which may be of lifelong duration. "Chronic serious and persistent mental illness" includes schizophrenia as well as a wide spectrum of psychotic and other severely disabling psychiatric diagnostic categories, but does not include organic mental disorders or a primary diagnosis of mental retardation or of alcohol or drug dependence.

SAMHSA SMI Definition

Based on the recommendations of the federal Center for Mental Health Services (CMHS), Wisconsin calculates prevalence rates from a 1997 SAMHSA study entitled "A Methodology For Estimating The 12-Month Prevalence Of Serious Mental Illness (SMI)." ⁴ The definition of SMI used in the study to derive the prevalence rates includes:

1. 12-month prevalence of non-affective psychosis or mania,
2. 12-month DSM-IV mental disorder and either planned or attempted suicide at some time during an individual with a DSM-IV diagnosis over the last 12 months and lacks any productive role,
3. An individual with a DSM-IV over the last 12 months who has a serious role impairment in their main productive roles, and
4. An individual with a DSM-IV over the last 12 months with serious interpersonal impairment.