
A FINAL REPORT 2012

# SEMCA Regional Needs Assessment FOR Substance Abuse

PREPARED BY: SCHOOL OF SOCIAL WORK AND SCHOOL OF MEDICINE | WAYNE STATE UNIVERSITY

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## Submitted to: Southeast Michigan Community Alliance (SEMCA)

WAYNE STATE UNIVERSITY
SCHOOL OF SOCIAL WORK

WAYNE STATE UNIVERSITY
SCHOOL OF MEDICINE

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# Executive Summary

A needs assessment is used as a starting point for developing strategies using a data informed process. As a coordinating agency charged with action plans for substance abuse treatment and prevention, SEMCA regularly seeks information to determine treatment needs within Out-Wayne and Monroe Counties. This assessment combines facts and data with perceptions from stakeholders to generate a more complete analysis of need in the region. Additional details about persistent and emerging problems with co-occurring disorders, criminal justice clients, and prescription drugs also adds to the understanding about need for treatment. As a result, SEMCA can be strategic in meeting the challenges presented and its mission as an agency to allocate resources using the best information available.

Substance use disorders touch many lives in many ways. SEMCA coordinates prevention and treatment efforts for indigent clients in the region. Our data collection shows that alcohol and prescription drug use are higher in the SEMCA region, and while some areas experience greater consequences, use and associated problems are spread throughout the region. Stakeholders view the primary cause of substance abuse as one of psychological coping. Respondents often focused on youth use as a major problem. While most respondents believe treatment and prevention are efficacious, many still endorse beliefs that abstinence and will power are viable solutions. Conflicting opinions held on causes and solutions points to the continuing need for education and norm changing.

In its totality, the report paints a picture of the overlapping and integrated nature of the causes and consequences of substance use. In particular this is evident as we note that substance abusers are very likely to also suffer from a mental health issue and many of those in the criminal justice system are also substance abusers. Furthermore, the problem continues to expand in complexity with the escalation of prescription drugs as a source of misuse and treatment admissions. Innovative approaches that involve physicians and pharmacists will be of most value.

The broader narrative of the report is the message it sends about the need for new types of action. Each recommendation section points to ways that SEMCA can adjust its work and partnerships to promote effective services for the benefit of the region. There is unmet need, but also opportunity to deploy resources in geographic areas that are indicative of future problems. Adapting treatment techniques and prevention messages using technology and social media can address transportation barriers as well as build upon the growing trend of their use in medicine and public health. Given the common characteristics among substance users, mental health clients and criminal justice cases, a collaborative approach that acknowledges the shared background is prudent. Recommendations also address unique needs faced by women clients in these systems. Finally, the report points to system level issues that hamper success in treatment. Building system capacity for recovery support is essential to reduce preventable re-admissions. Expanding recovery care within the SEMCA substance abuse system and promoting recovery in the community at large will create a stronger support base for those in need and signal SEMCA's full investment in recovery oriented systems of care.

# Appendices

# Chapter 1: Introduction

Substance use disorders continue to be one of the largest problems impacting individual health, relationships, and employment, generating personal and economic costs that exceed $275 billion dollars annually (Harwood et al., 1984; Henrick, Fountain, & Livermore, 1998; Substance Use Disorder Calculator, 2012). Identifying and supporting effective strategies for prevention and treatment are key. However, strategies can be misguided if the problem assessment does not pinpoint the needs and identify strengths and capacity of the service system to address the problem. Moreover, effective strategies must be informed and updated with knowledge about what works and grounded in the voices and preferences of those most affected.

What we know about the nature of substance-use disorders is that they are both constant and dynamic. The constancy is exhibited in peer influence and stress, which continue to be associated with substance use disorders. The problem is also dynamic, in that drug of choice, populations using them and perceptions of the problem all change. This is one of the major reasons why a periodic needs assessment is necessary and important. Organizations may assume that the problem has not changed enough, that needs for treatment are obvious, and they settle on solutions before analyzing the problem and its causes (Altschuld, 2004).

Treatment for substance-use disorders is also changing, with an expanded framework of practices and principles. Recovery has been redefined and there are now guidelines for developing recovery-oriented systems of care (ROSC) (Sheedy & Whitter, 2009). Recovery is viewed as a process of change, with goals of abstinence but also improved wellness and quality of life (CSAT, 2005). Recovery systems of care reflect a new perspective that recognizes the multiple paths to recovery, with a continuum of care and support that coordinates efforts which respond to individual strengths and needs. This new vision of recovery will impact the way systems treat individuals with substance-use disorders and the way treatment resources are organized and services implemented.

> "Those responsible for administering resources may consider how to use their funding to incentivize new designs or create linkages among providers, so that recovery is seen and supported as a lifelong process. Paradigm shifts in substance abuse treatment, such as ROSC present opportunities to join targets of unmet need with resources in new and innovative ways."

States are the largest purchasers of substance-abuse prevention and treatment services. Using federal block grant funding, they contract with administrative or coordinating agencies that are responsible for planning, funding, and monitoring services at the local level. The State of Michigan mandates that coordinating agencies submit annual action plans that identify trends in use, consequences across individuals and communities and service utilization. Southeast Michigan Community Alliance (SEMCA) is the coordinating agency for communities located in Out-Wayne (excluding the City of Detroit) and Monroe

Counties. This area represents a diverse set of municipalities with approximately 1.28 million people. With such diversity, SEMCA strives to be strategic and responsive in fulfilling its responsibilities. To this end, SEMCA sought proposals to conduct a regional needs assessment "for the purpose of leveraging limited substance abuse resources to address regionally specific current and anticipated community needs to achieve the greatest impact" (Southeast Michigan Community Alliance Request for Proposal, 2010). Using a strategic approach, a regional needs assessment would have great tactical value for SEMCA in allocating resources to meet the needs in its multiple target communities.

SEMCA contracted with researchers in the School of Social Work and the School of Medicine at Wayne State University, located in Detroit, to conduct a regional needs assessment. The researchers make up a multi-disciplinary team of social work, psychiatry, pharmacology, and political science expertise with significant experience in community needs assessment, substance-use disorders and close familiarity with the diverse communities and agencies in the SEMCA region. The team met early and often with SEMCA administrators to discuss the goals for the assessment and to identify SEMCA's specific preferences for information and data that would help the organization to understand the service population and focus resources in the areas of greatest need.

The goal of the assessment was to determine treatment needs within Out-Wayne and Monroe Counties. To achieve this, researchers used an approach that would provide evidence on the scope and severity of the problem among youth and adults and identify areas at higher risk, as well as uncovering emerging patterns in use across the SEMCA region. Community beliefs and attitudes about the causes of the problem and its solutions were also targets for the assessment. SEMCA was particularly interested in the current and projected need for services and how well the current services support recovery management. Special attention was paid to understanding the need for prevention; however, a complete prevention needs assessment was completed in 2009 and available from SEMCA. Finally, the funder also requested that the needs assessment strategies place a special emphasis on co-occurring disorders, criminal justice involvement and prescription-drug abuse. This comprehensive set of expectations meant that the needs assessment design would use both quantitative and qualitative methods to capture the problems and services as part of a complex network of interactions, perceptions, and norms that exist among residents, professionals, and organizations in the two county areas.

## The Approach

This needs assessment is based on a framework that begins with a problem definition analysis. The goal was to answer questions such as:

- What are the features, consequences, magnitude and distributions of the problem for Out-Wayne and Monroe Counties?
- What factors contribute to the problem and are barriers to solving the problem?
- What are the characteristics of those who are experiencing the problem?

The researchers identified several conditions that represent the problem. For example, we wanted to know how many people (age 11 and older) consume alcohol and illicit drugs. How many were being hospitalized for substance use disorders? How many residents were being served through the public substance abuse treatment system? How many residents in the SEMCA region were dying because of use and abuse?

To understand what contributes to this problem it was important for us to examine risk data and document precursors to entering the treatment. Here the types of items we sought included asking consumers what brought them into treatment and how having a co-occurring disorder impacted their help-seeking and support received? In addition, we asked how, and under what circumstances, family and friends seek out resources to assist someone else. This information would provide evidence on barriers to getting individuals into treatment.

Learning about the characteristics and experiences of those with a substance use disorder would tell us if the services are adequate and what consumers would recommend to improve the achievement of successful outcomes. Recovery is a process and is larger than formal treatment; thus it was important to understand what is needed from the community at large to support the personal goals of individuals in recovery.

As suggested by Bradshaw, (1972) conditions become problems when they are judged to be negative and when a frame of reference is offered to interpret whether or not these conditions are deemed as sufficient for action. This movement from conditions to problems takes us further to establishing need. In designing the needs assessment, we followed Bradshaw's typology in selecting indicators and data collection strategies.

| Category of Need | Data Collection Strategies |
|---|---|
| A. Normative Need –measuring use against some standard (national/state) | Prevalence of use: adult and youth surveys; mortality data |
| B. Felt or Perceived Need –what clients/citizens think or feel their needs are | Perspectives of causes, consequences and solutions by providers, key informants, consumers; community and consumer perspectives of available services |
| C. Expressed Need - how many people have sought help | Hospital discharges, treatment admissions, community survey |
| D. Relative Need -gap between level of service in one area and those in another area | Treatment access and locations; drug court data recovery services; morbidity and mortality comparisons |

Using these concepts provided different perspectives of need, rather than relying on only one method. For example, relative need directs attention to comparing the rates of various indicators of the problem across the communities within the SEMCA service region. Perceived need from residents, consumers and professionals will help SEMCA develop more responsive services. Treatment admission data is an indicator of expressed need that, when combined with substance use prevalence data, will help to identify and estimate those needing but not receiving treatment.

## Data Collection Methods

The research team used a social indicator-based approach that collected archival data on social problems and functioning at a community level in order to estimate relative levels of need for substance abuse services among the communities in Out-Wayne and Monroe counties. Social demographic data and indicators of substance use disorders included:

- U.S. Census Data
- National Survey on Drug Use and Health Data
- Michigan Profile for Healthy Youth Data and Youth Risk Behavior Survey Data, Michigan Department of Education
- Southeast Michigan Community Alliance Treatment Admission Data
- Michigan State Court Administrators Data
- Alcohol- and drug-related hospital discharge data
- Alcohol- and drug-related mortality data

To supplement the secondary data, the team also employed primary data collection strategies to give contextual depth to the needs assessment and present a more descriptive voice from the many stakeholders of the SEMCA region. A summary of methods is highlighted below.

### Table1 Primary Data Collection Strategies by Stakeholder Groups

| | Structured Interviews | Focus Groups | Web-Based Survey |
|---|---|---|---|
| Consumers in Treatment/ Recovery/Drug Courts | 40 | 4 | |
| Key Informants | 32 | 3 | |
| Treatment Staff | | | 117 |
| Prevention Staff | | | 34 |
| Executive Directors of SEMCA Provider Agencies | | | 34 |
| Community Residents | 563* | | |
| Pharmacists | | | 353 |

*Telephone and mail survey

All protocols used for the needs assessment were submitted to and approved by the Wayne State University Institutional Review Board, including informed-consent procedures. A more detailed description about primary and secondary data sources are included in Appendix A, including limitations of the data.

## Analysis Strategy and Outline of Report

The analysis and presentation of the data begins with a descriptive format that highlights socio-demographic data for the two county areas. This is followed by a thorough depiction of substance-use disorders, in terms of substance use and related harm. The researchers mapped select indicators to show geographical differences and "hotspots" in the region. Comparisons with state and national data and other evaluative strategies is used to determine need. Quantitative data on the problem is followed with a qualitative analysis of perspectives of the problem. Here individual resident and key informant views on the causes, consequences and solutions are summarized and compared. Next, the analysis is focused on the SEMCA treatment and prevention service system. The context under which treatment and prevention providers operate helps to understand the organization and delivery of services and supports. The analysis delves into the screening and referral process and how clients access treatment. A qualitative analysis of the treatment experience from consumers provides information on perceived effectiveness, quality, needs, and

barriers. A description of prevention services and need and views on recovery and needed supports wraps up this chapter. The researchers then focused on examining three unique aspects of the problem as requested by SEMCA: Co-Occurring Disorders, Criminal Justice Involvement and Prescription Drug Abuse. Within the chapters on co-occurring disorders and criminal justice, researchers examine and compare prevalence data, describe the system of treatment and services delivered and probe further to understand how individuals are identified and treated, based on data from multiple perspectives. The assessment of prescription drug abuse offers a unique opportunity to understand the problem from the views of key informants and practicing pharmacists, a group with significant insight whose perspectives have not been systematically studied. The needs assessment report ends with a chapter on the analysis of data that cut across the areas of assessment. This chapter organizes and integrated the results from the previous chapters into areas of need pertaining to:

- Awareness of the problem
- Availability of services
- Accessibility of services
- Quality of services

Where appropriate, the needs assessment identifies geographical priorities for targeting resources and structures of support. We also provide strategies for the short term and recommendations for long term solutions.

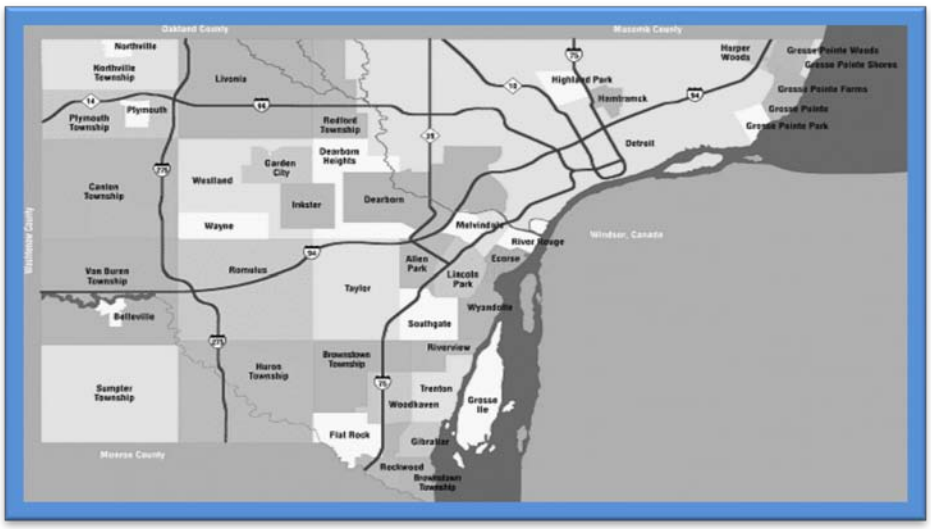
# Chapter 2: Socio-Demographic Profile of the SEMCA Region

## Introduction

The purpose of this chapter is to describe the SEMCA region and its residents' demographic characteristics. This context is important because SEMCA is not a homogenous area; it has communities of prosperity and poverty, race and ethnic diversity, and a wide range of cities, townships and villages. It encompasses both small areas of 3,200 residents and areas with almost 100,000 residents. SEMCA's boundaries include one entire county (Monroe) as well as a significant proportion of another, Wayne, which contains broad contiguous and small non-contiguous target communities (County of Wayne, 2010). In addition to Monroe County, SEMCA's target region includes the Out-Wayne County population, or those living in Wayne County outside of Detroit. Monroe County is very diverse in its governing structure because it is made up of twenty four (24) municipalities which include 3 charter townships, 12 townships, 4 cities, and 5 villages (Monroe County Board of Commissioners, 2012). In contrast, Wayne County has 43 municipalities, which include 33 cities, not including Detroit and 9 townships. With such wide differences, it is essential that a regional assessment describe sub-communities with precision and to understand how each community ranks in comparison to other communities and the larger SEMCA region as a whole.

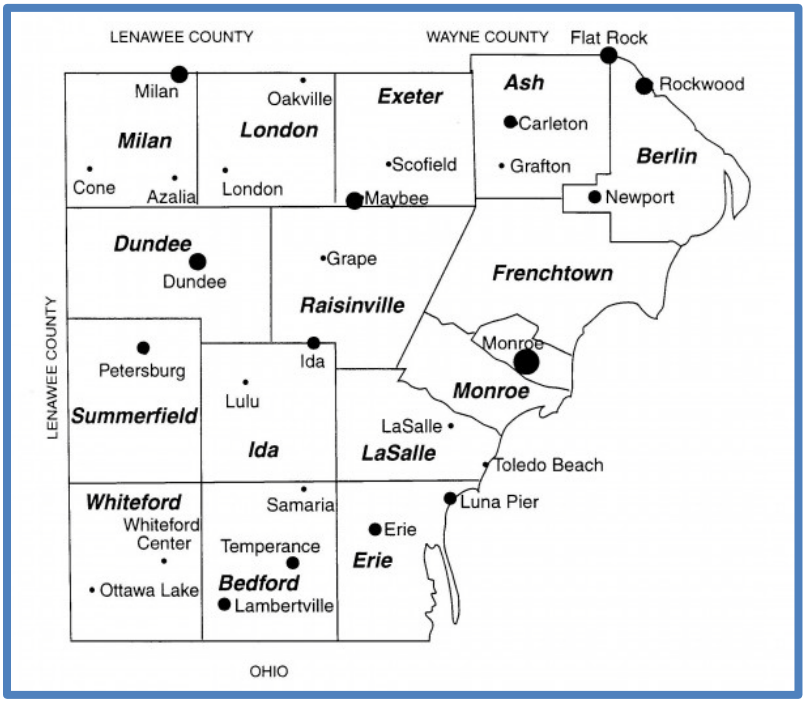
The maps below show the geographic areas under the jurisdiction of SEMCA. The SEMCA area covers approximately 1,046 square miles.

## Wayne County Map




*all cities, excluding Detroit are under the jurisdiction of SEMCA

## Monroe County Map




## Demographic Profile of SEMCA Region

This chapter includes data largely from the U.S. Census Bureau, American FactFinder, and Grassroots Government (see Appendix A for methodology on specific sources of secondary data). This data was used to first describe the governmental structures of the entire target region. Next, the information is organized by municipality, with specific population characteristics, including data on population size, geographic size, population density, percentage of non-white population, age, gender, household income, percent of households living below poverty, and percent of owner-occupied housing. Finally, we make comparisons across cities, with state and national regions. In Appendix B the municipality data is presented in quartiles, grouping cities together, based on their ranking. Quartile rankings demonstrate how communities cluster together at the high and low ends, and where the median (50%) of the communities rank. The quartiles also demonstrate the variability across the SEMCA region and among the quartile ranges.

## Cities versus Townships

Townships and counties are statutory units of government, having only those powers expressly provided or implied by state law. Cities and most villages are vested with home-rule powers, meaning they have their own governing structure and can do as they wish, as long as actions are not prohibited by state or federal law. There are two types of townships in Michigan: general law townships and charter townships. Charter township status is a special classification created to provide additional powers and streamline administration for governing a growing community. A primary motivation for townships to adopt the charter governing format is to provide greater protection against annexation by a city. The state of Michigan currently has 1,240 townships, which vary considerably in geographical size and population (Grassroots Governments, n.d.)

## SEMCA Region Socio-Demographics

As described above, the SEMCA target region contains broad geographic boundaries, where the sheer number of communities is large, producing various ranges of population density. The Socio-Demographic Profile of the SEMCA region (Table 2.1 below) displays this data and other population characteristics for each municipality in the target area.

Table 2.1 Socio-Demographic Characteristics by Municipality
Wayne County

| Wayne County | Total Population | Population Density | Sq. Miles | % of non-white | % of the population between 10-19 years of age | % Bachelor Degree or Higher | % male population | Median Household Income | % of household below poverty | % owner occupied housing |
|---|---|---|---|---|---|---|---|---|---|---|
| Allen Park | 28,210 | 40.30 | 7.00 | 7.1 | 13.40 | *22.40* | 48.1 | *56,310* | *5.20* | *90.20* |
| Belleville | *3,653* | *32.04* | *1.14* | *12.20* | *10.10* | *21.80* | *50.20* | *44,631* | *2.00* | *72.30* |
| Brownstown Township | *28,725* | *12.80* | *22.45* | *13.20* | *12.60* | *19.30* | *50.10* | *62,882* | *7.50* | *80.20* |
| Canton Township | *83,607* | *23.22* | *36.00* | *21.20* | *14.30* | *45.20* | *49.60* | *82,874* | *3.90* | *80.10* |
| Dearborn | 98,153 | 40.51 | 24.23 | 10.90 | 16.10 | *30.10* | 49.40 | *48,905* | *16.90* | *73.50* |
| Dearborn Heights | 57,774 | 49.21 | 11.74 | 13.90 | 14.20 | *16.90* | 48.40 | *48,551* | *8.20* | *84.20* |
| Ecorse | 9,512 | 33.97 | 2.80 | 56.00 | 15.00 | *5.50* | 47.30 | *27,557* | *31.10* | *61.00* |
| Flat Rock | 9,878 | 15.13 | 6.53 | 8.90 | 15.20 | *16.00* | 48.10 | *58,583* | *9.10* | *77.10* |

| Wayne County | Total Population | Population Density | Sq. Miles | % of non-white | % of the population between 10-19 years of age | % Bachelor Degree or Higher | % male population | Median Household Income | % of household below poverty | % owner occupied housing |
|---|---|---|---|---|---|---|---|---|---|---|
| Garden City | 27,692 | 47.18 | 5.87 | 7.50 | 13.80 | *11.60* | 49.1 | *55,529* | *4.90* | *84.80* |
| Gibraltar | 4,957 | 12.91 | 3.84 | 9.20 | 13.10 | *18.20* | 51.80 | *61,726* | *2.80* | *84.90* |
| Grosse Ile Township | *10,118* | *10.53* | *9.61* | *4.20* | *12.50* | *41.70* | *50.10* | *85,701* | *3.20* | *93.20* |
| Grosse Pointe City | 5,421 | 51.14 | 1.06 | 6.80 | 16.70 | *61.70* | 46.40 | *85,556* | *4.50* | *81.20* |
| Grosse Pointe Farms | 9,479 | 34.47 | 2.75 | 4.60 | 14.80 | *70.00* | 48.80 | *106,118* | *1.50* | *97.80* |
| Grosse Pointe Park | 11,555 | 53.25 | 2.17 | 15.00 | 16.60 | *58.40* | 48.40 | *97,149* | *4.20* | *77.10* |
| Grosse Pointe Shores | *2,250* | *22.73* | *0.99* | *7.80* | *14.60* | *59.20* | *50.30* | *150,250* | *0.80* | *97.80* |
| Grosse Pointe Woods | 16,135 | 49.65 | 3.25 | 8.60 | 14.50 | *55.10* | 47.90 | *90,073* | *2.10* | *94.20* |
| Hamtramck | 22,423 | 107 | 2.09 | 46.40 | 16.40 | *11.00* | 51.60 | *26,008* | *33.20* | *55.70* |
| Harper Woods | 14,236 | 54.54 | 2.61 | 50.40 | 15.90 | *25.90* | 46.20 | *48,729* | *7.30* | *82.30* |
| Highland Park | 11,776 | 39.65 | 2.97 | 96.80 | 15.50 | *7.50* | 49.20 | *18,712* | *41.50* | *38.20* |

| Wayne County | Total Population | Population Density | Sq. Miles | % of non-white | % of the population between 10-19 years of age | % Bachelor Degree or Higher | % male population | Median Household Income | % of household below poverty | % owner occupied housing |
|---|---|---|---|---|---|---|---|---|---|---|
| Huron Township | 16,078 | 4.52 | 35.57 | 4.30 | 14.40 | *15.40* | *49.60* | *62,591* | *7.80* | *94.90* |
| Inkster | 25,369 | 40.59 | 6.25 | 79.50 | 16.50 | *12.50* | 46.80 | *34,402* | *19.40* | *55.50* |
| Lincoln Park | 38,144 | 64.76 | 5.89 | 15.80 | 14.00 | *9.70* | 49.00 | *46,413* | *10.20* | *80.00* |
| Livonia | 96,942 | 27.15 | 35.70 | 8.00 | 13.20 | *33.10* | 49.30 | *71,928* | *2.10* | *89.60* |
| Melvindale | 10,715 | 39.39 | 2.72 | 33.20 | 14.00 | *10.40* | 48.1 | *37,876* | *13.50* | *68.70* |
| Northville | 5,970 | 29.12 | 2.05 | 6.30 | 12.80 | *61.90* | 47.9 | *107,344* | *0.00* | *79.40* |
| Northville Twp | *24,846* | *15.10* | *16.45* | *15.10* | *13.20* | *55.00* | *47.70* | *101,863* | *1.90* | *79.70* |
| Plymouth | 9,132 | 41.32 | 2.21 | 5.80 | 9.90 | *52.40* | 48.00 | *76,741* | *1.80* | *69.50* |
| Plymouth Township | *25,959* | *16.31* | *15.92* | *6.30* | *12.60* | *50.80* | *48.80* | *89,922* | *1.30* | *85.50* |
| Redford Township | *47,047* | *41.90* | *11.23* | *17.90* | *12.20* | *19.30* | *48.90* | *52,573* | *5.20* | *89.50* |
| River Rouge | 7,903 | 29.82 | 2.65 | 60.60 | 17.00 | *6.20* | 47.00 | *26,682* | *33.30* | *57.60* |
| Riverview | 12,486 | 28.38 | 4.40 | 7.00 | 12.80 | *21.70* | 46.40 | *48,527* | *9.40* | *63.10* |
| Rockwood | *3,241* | *12.00* | *2.70* | *1.70* | *12.90* | *15.80* | *53.30* | *57,415* | *3.00* | *76.20* |

| Wayne County | Total Population | Population Density | Sq. Miles | % of non-white | % of the population between 10-19 years of age | % Bachelor Degree or Higher | % male population | Median Household Income | % of household below poverty | % owner occupied housing |
|---|---|---|---|---|---|---|---|---|---|---|
| Romulus | 23,989 | 6.74 | 35.61 | 49.50 | 15.80 | ***11.60*** | 48.40 | ***50,764*** | ***12.30*** | ***73.10*** |
| Southgate | 30,047 | 43.86 | 6.85 | 11.30 | 12.60 | ***16.80*** | 47.80 | ***50,363*** | ***3.80*** | ***70.50*** |
| Sumpter Township | ***11,432*** | ***3.04*** | ***37.57*** | ***9.80*** | ***13.30*** | ***10.30*** | ***51.80*** | ***64,446*** | ***8.90*** | ***92.90*** |
| Taylor | 63,131 | 26.75 | 23.60 | 22.00 | 14.20 | ***9.20*** | 47.90 | ***47,236*** | ***11.70*** | ***72.90*** |
| Trenton | 18,853 | 25.90 | 7.28 | 4.50 | 13.30 | ***23.00*** | 48.10 | ***58,380*** | ***4.50*** | ***83.60*** |
| Van Buren Township | ***26,546*** | ***7.83*** | ***33.90*** | ***32.40*** | ***12.30*** | ***26.20*** | ***50.70*** | ***57,723*** | ***7.40*** | ***70.50*** |
| Wayne | 17,593 | 29.22 | 6.02 | 23.70 | 13.70 | ***12.60*** | 48.20 | ***42,721*** | ***8.80*** | ***65.90*** |
| Westland | 84,094 | 41.16 | 20.43 | 24.20 | 12.60 | ***17.30*** | 47.50 | ***48,822*** | ***8.60*** | ***68.90*** |
| Woodhaven | 12,875 | 20.15 | 6.39 | 11.10 | 13.40 | ***18.10*** | 49.50 | ***61,826*** | ***5.80*** | ***76.90*** |
| Wyandotte | 25,883 | 49.11 | 5.27 | 5.30 | 13.10 | ***15.00*** | 48.90 | ***51,245*** | ***7.80*** | ***75.20*** |

*Data were collected from the 2010 census - U.S. Census Bureau http://quickfacts.census.gov/qfd/states/26/26163.html

**Italicized and bolded data could only be found in the 2005-2009 U.S Census Bureau American FactFinder ACS Fact Sheet at the time of data collection http://factfinder.census.gov/home/saff/main.html?_lang=en

Table 2.2 Socio-Demographic Characteristics by Municipality
Monroe County

| Monroe County | Total Population | Population Density | Sq. Miles | % of non-white | % of the population between 10-19 years of age | % Bachelor Degree or Higher | % male population | Median Household Income | % of Household below poverty | % owner occupied housing |
|---|---|---|---|---|---|---|---|---|---|---|
| Ash Township | 7,783 | 2.24 | 34.80 | 3.70 | 14.60 | 12.20 | 49.70 | 55,483 | 7.60 | 88.80 |
| Berlin Charter Township | 9,299 | 2.51 | 37.10 | 5.10 | 14.80 | 13.30 | 51.00 | 61,996 | 6.90 | 83.50 |
| Bedford Township | 31,085 | 7.97 | 39.00 | 2.70 | 14.80 | 24.20 | 48.90 | 63,421 | 6.20 | 85.80 |
| City of Luna Pier | 1,436 | 8.45 | 1.70 | 10.50 | 12.80 | 14.70 | 48.30 | 43,068 | 19.40 | 68.10 |
| City of Milan | 1,601 | 4.82 | 3.32 | 5.40 | 13.30 | 26.60 | 51.20 | 65,455 | 4.90 | 89.40 |
| City of Monroe | 20,733 | 22.61 | 9.17 | 14.60 | 14.30 | 18.70 | 47.00 | 38,944 | 19.10 | 62.10 |
| City of Petersburg | 1,146 | 22.92 | 0.50 | 4.80 | 13.10 | 13.80 | 49.70 | 51,719 | 11.00 | 71.90 |
| Dundee Township | 6,759 | 1.41 | 48.00 | 4.80 | 14.60 | 12.50 | 50.10 | 53,268 | 8.20 | 75.60 |
| Erie Township | 4,517 | 1.88 | 24.00 | 6.00 | 13.70 | 15.70 | 50.60 | 45,521 | 8.30 | 86.50 |
| Exeter Township | 3,968 | 1.08 | 36.60 | 8.10 | 15.10 | 9.20 | 50.20 | 60,667 | 12.40 | 90.70 |
| Frenchtown Charter Township | 20,428 | 4.73 | 43.20 | 9.10 | 14.30 | 13.70 | 49.30 | 51,286 | 14.90 | 73.80 |
| Ida Township | 4,964 | 1.35 | 36.90 | 2.20 | 17.40 | 18.00 | 50.90 | 70,742 | 6.10 | 91.40 |
| LaSalle Township | 4,894 | 1.83 | 26.80 | 4.70 | 14.30 | 15.00 | 51.20 | 63,846 | 13.40 | 91.60 |
| London Twp | 3,048 | 0.85 | 35.90 | 15.70 | 15.50 | 11.70 | 51.30 | 63,704 | 2.00 | 89.60 |
| Milan Township | 1,601 | 0.46 | 35.10 | 5.40 | 13.30 | 10.20 | 51.20 | 65,455 | 4.90 | 89.40 |

| Monroe County | Total Population | Population Density | Sq. Miles | % of non-white | % of the population between 10-19 years of age | % Bachelor Degree or Higher | % male population | Median Household Income | % of Household below poverty | % owner occupied housing |
|---|---|---|---|---|---|---|---|---|---|---|
| Monroe Charter Township | 14,568 | 7.92 | 18.40 | 9.40 | 13.70 | 16.90 | 48.90 | 46,718 | 5.70 | 77.10 |
| Raisinville Township | 5,816 | 1.20 | 48.60 | 5.10 | 16.10 | 14.90 | 49.90 | 64,926 | 5.40 | 93.20 |
| Summerfield Township | 3,308 | 0.78 | 42.40 | 3.40 | 16.60 | 19.00 | 50.80 | 62,135 | 4.10 | 89.80 |
| Village of Carleton | 2,345 | 23.45 | 1.00 | 6.00 | 14.70 | 8.20 | 49.60 | 43,092 | 10.50 | 83.20 |
| Village of Dundee | 3,957 | 12.37 | 3.20 | 4.80 | 14.10 | 16.60 | 48.10 | 45,268 | 9.40 | 67.10 |
| Village of Estral Beach | 418 | 8.36 | 0.50 | 0.07 | 14.60 | 9.50 | 53.30 | 50,313 | 6.20 | 86.30 |
| Village of Maybee | 562 | 4.70 | 1.20 | 4.50 | 13.70 | 8.10 | 49.80 | 58,542 | 16.20 | 74.10 |
| Village of South Rockwood | 1,675 | 7.00 | 2.40 | 6.20 | 12.00 | 14.10 | 50.70 | 52,476 | 9.80 | 62.70 |
| Whiteford Township | 4,602 | 1.14 | 40.30 | 5.10 | 14.50 | 18.70 | 50.60 | 54,457 | 5.90 | 86.50 |

*Data were collected from the 2010 census data- U.S. Census Bureau http://quickfacts.census.gov/qfd/states/26/26163.html

## Total Population, Square Miles, and Population Density

### *Total Population*

- The SEMCA region includes Monroe County and Out-Wayne County Michigan and has a population of over 1.1 million residents. Municipalities in the SEMCA region have an average population of about 26,000 residents.
- Dearborn spans over 24 square miles and is the 8th largest city in Michigan, with the largest population in the SEMCA region, over 98,000 residents.
- In contrast, the Village of Rockwood has the smallest population in the SEMCA region and spans a mere 2.7 square miles, with a population of only 3,241.
- Out-Wayne's total population is 1,093,829, covers 475.76 square miles and has about 2,299 residents per square mile.
- Monroe County's total population is 152,021, covers 549.39 square miles, and contains about 277 persons per square mile.

### *Square Miles*

- The SEMCA region of Southeastern Michigan is diverse and encompasses 67 municipalities, totaling over 524 square miles. The average area, per city, in the SEMCA region is 11.9 square miles.
- Bedford, in Monroe County, has the largest mileage, area encompassing just over 39 square miles. Next, Sumpter Township covers 36 square miles.
- Bedford, Sumpter Township, Canton, Livonia, Romulus, Huron Township, and Van Buren Township are the cities with the largest square mile areas within the SEMCA region.
- Grosse Pointe Shores is the smallest city in Out-Wayne County in terms of area, covering only 0.99 square miles; Hamtramck, Northville, and Plymouth all measure just over 2 square miles each.

### *Population Density*

- Grosse Ile Township has the region's smallest population density, with roughly 1,053 inhabitants per square mile.
- The most densely populated city in the SEMCA region is Hamtramck, with about 10,729 residents per square mile.

## Percent of Non-white Population, Youth Age 10-19, Education, Gender

### *Percent of Non-white Population*

- The average percentage of non-white residents across the SEMCA region is less than 20% per municipality.
- A non-white person , according to the 2010 Census definition, is any respondent who indicated any race other than non-Hispanic white (Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander, multiracial, mixed, interracial, Hispanic, Latino, or Spanish, Mexican, Puerto Rican, or Cuban).
- The city in the SEMCA region with the highest percentage of minority residents is Highland Park, in which 97% of its 11,776 total population are non-white.
- Highland Park, Inkster, River Rouge, Ecorse, Harper Woods, Romulus and Hamtramck are cities with a higher representation of minorities, with minority populations ranging between 46.4 and 96.8%.
- In contrast, the city with the highest segment of whites is Rockwood, where 98.3% of its 3,241 total population is white.
- Second highest in % of non-white residents is Bedford, where 98% of its 31,075 total population is white.
- Ecorse, Hamtramck, Harper Woods, River Rouge and Romulus represent an equal proportion of minority and Caucasian residents.
- Bedford, which is in Monroe County, consists of 2% non-white, 5.9% less than Monroe County's average non-white population.

### *Percent of Population between 10-19 years of age*

- The average percent of adolescents between the ages of 10 and 19 across the entire SEMCA region is less than 15%; the cities of the SEMCA region have an almost 85% adult population.
- River Rouge has the largest portion of residents between 10 and 19 years of age (17%) and Plymouth has the smallest proportion of youth (9.9%).

### *Percent of Population with Bachelor Degree or Higher*

- The average percent of inhabitants with a Bachelors Degree or higher across the entire SEMCA region is 26%.
- 70% of the residents of Grosse Pointe Farms possess a Bachelors degree or higher.
- Canton Township has the greatest individual number of residents with a Bachelors degree or higher with almost half (45.2%) of their 83,607 inhabitants possessing a Bachelors degree or higher (37, 790).
- The city with the smallest percent of inhabitants holding a Bachelors or higher, according to 2005-2009 Census data, is Ecorse with only 5.5% of its residents reporting acquisition of a Bachelors degree or higher.
- Additionally, Highland Park has the lowest number of residents with education above that of a Bachelors level, with 7.5% of its 11,776 total population achieving a Bachelors Degree or higher (883).

### *Percent of Male Population*

- The variance between cities in regards to the male population is quite low. Most cities report a male population between 47% - 49%.
- The city with the highest percent of males within the SEMCA region is Rockwood, where males represent 53% of the population.
- In contrast, Dearborn has the greatest number of males in this region with 48,488 of its 98,153 total population males.
- Harper Woods has the lowest percent of males, with 46% of the 14,236 total population representing males.
- Westland has the smallest number of individual males with 4,204 more females than males in its total population of 84,094.

## Median Household Income, Percent Living Below Poverty, Percent Owner Occupied Housing

### *Median Household Income*

- The average household income for residents across the SEMCA region is $61,582.
- Grosse Pointe Shores' residents are high income earners; household incomes there exceed $150,000 per year on average, and a mere 0.8% of their population lives below the poverty line.
- Respectively, Grosse Pointe Farms residents earn a median household income of $106, 118 and Northville residents earn a median household income of $101,863 per year.
- Highland Park residents report the lowest annual household income, with an average household income just above $18,500. Highland Park is also the city in the SEMCA region with highest percent of households living below the poverty line; 41.5% of households within Highland Park live in poverty.

### *Percent of Households Living Below Poverty*

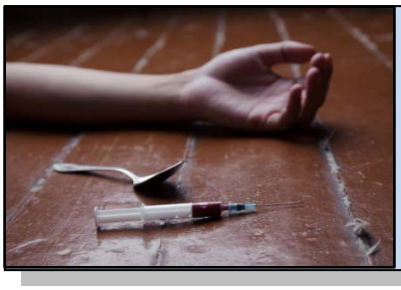
- About 9% of the total population living within the SEMCA region report living at or below the poverty line.
- 16,600 (17%) Dearborn's residents live below poverty, making it the city with the greatest number of individuals in that category.
- Highland Park is the city with the highest percentage of households living below the poverty line, with 41.5% of households in that category.
- Northville is unique in that it is the only city in the SEMCA region with none of the inhabitants below the poverty line, according to the 2005-2009 Census.

### *Percent of Owner Occupied Housing*

- On average, 77% of the total individuals living in the SEMCA region report owning their own homes.
- Grosse Pointe Shores and Grosse Pointe Farms have the highest percentage of the population living in owner-occupied housing (97.8%).
- Livonia has the highest number of individuals who own their homes, with almost 86,860 of their 96,942 residents having home ownership (90%).
- Highland Park has the smallest percent of its populace with home ownership with only 38%.

## Comparisons across cities versus State and National averages

Residents within the SEMCA region are likely to own their homes, possess a Bachelors Degree or Higher, and have a household income around $61,000. The cities with the highest ratio of minorities also are less highly educated, earn a lower income, and live below the poverty line. In relation to State and National averages, residents of the SEMCA region as a whole fair well. In the SEMCA region, 77% of citizens are home owners while the U.S average for home ownership is about 67%. The average percentage of home ownership for the state of Michigan is 74.6%. The state average of those that received a Bachelor's Degree or higher is 24.5%, compared to the SEMCA region where those holding a Bachelors Degree or higher number about 26%. Across the U.S. the average is 27.5% of those that achieved a Bachelor's Degree or higher. The average household income within the SEMCA region is higher than the U.S. median, which is $51,425 and also higher than the State of Michigan median of $45,254. The average household income for those residing within the SEMCA region is $61,582, as stated above. The SEMCA region has an average of 9% of its population living below the poverty line, which is less than the State of Michigan and national averages. The State of Michigan has 16.1% of its citizens living below poverty and the U.S. has 13.5% of its populace living below poverty.



# Chapter 3: Problem of Substance Use Disorders: Use and Harm

## Introduction

The study of substance-use disorders (SUD), and the prevention of substance abuse, is important for any community interested in the health and wellbeing of its citizens. Substance-use disorders have deleterious impacts on communities and residents, contributing to disease, substance-related traffic accidents, injuries and fatalities and disturbances in the family unit, just to name a few. Millions of individuals are impacted by substance-use disorders and associated physical and psychological illnesses each year (Rehm, 2011). Therefore it becomes important for policy makers, administrators and providers of substance abuse treatment services to understand the scope and consequences of SUD in order to direct resources for prevention and treatment efforts that will have the most impact. Is the use of certain drugs increasing, while the use of others decreasing? Are certain populations affected by SUD more than others? What are the rates of morbidity and mortality related to SUD and how do these rates vary across communities? Data on the trends of use and their effects can provide evidence from which to make critical resource decisions affecting those most in need.

Of particular concern to stakeholders is to understand the population and geographical characteristics of those in the current treatment system. In an area as large and complex as the SEMCA region, it is important to document trends in the types of services used and where clients are being treated. Do some populations stay longer in treatment or leave, against advice, more than other groups? The answers to this question, and many others related to SUD, are complex and multi-dimensional.

In order to understand the nature and impact of substance use disorders in a particular region, one must first examine the national data. The National Survey of Drug Use and Health (NSDUH) provides the most valid and reliable national data. In addition, residents of Out-Wayne and Monroe County are included in estimates of the southeastern Michigan sub-state region, as part of the NSDUH reports of alcohol and drug use. Therefore, estimates of use for this region can be compared against national and state averages and generalized to the SEMCA region. We also present data from regional surveys of adult residents and youth use.

This information is followed by data that shows the consequences of substance-use disorders, including hospital discharges, treatment episodes and admissions and mortality rates for the SEMCA region.

## National Survey of Drug Use and Health

Table 3.1 displays national and state rates for alcohol use, binge drinking, illicit drug use, marijuana use and prescription drug use, which can be compared to the rates for this sub-state region.

### Table 3.1 Data from SAMHSA's National Study on Drug Use and Health

| | National* 2010 | State of Michigan* 2009 | Sub-state Region Southeast** 2002-2004 Estimates |
|---|---|---|---|
| Alcohol use | 51.80% (131.3 Million) | 54.64% (4.55 Million) | 53.73% (2.6 Million) |
| | | | |
| Binge drinking | 23.1% (58.6 Million) | 25.33% (2.11 Million) | 22.51% (1.1 Million) |
| | | | |
| Illicit Drug Use | 8.9% (22.6 Million) | 9.49% (791,000) | 9.55% (467,802) |
| | | | |
| Marijuana | 6.90% (17.4 Million) | 7.51% (626,000) | 7.06% (345,830) |
| | | | |
| Prescription drug (non-medical use) | 2.70% (7.0 Million) | 5.69% (474,000) | 5.66% (277,252) |

* represents % of use in last 30 days- data retrieved from SAMHSA at: http://oas.samhsa.gov/nsduhlatest.htm
**Population Estimates for 2002-2004 Southeastern Michigan Sub-state Region retrieved from SEMCOG at:http://library.semcog.org/InmagicGenie/DocumentFolder/PopulationandHouseholdsinSoutheast%20Michigan2010.pdf.
"The sub-state region definitions are provided by the state's Bureau of Substance Abuse and Addiction Services, Michigan Department of Community Health. All sub-state regions for Michigan are defined in terms of the State's 83 counties, with the exception of the Detroit City and Southeast regions. The Southeast sub-state region comprises Monroe County and all the tracts that are in Wayne County (except those in the Detroit City limits)."

*Alcohol Use:* Alcohol use is defined by SAMHSA in this study as the consumption of at least one drink in the past 30 days. Just over half (52%) of the population in national estimates in 2010 report using alcohol.

*Binge Drinking:* Binge drinking is defined by SAMHSA as; five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. National averages for binge drinking are considerably less than for alcohol use with about 23% of the population stating they have engaged in binge drinking in the last 30 days.

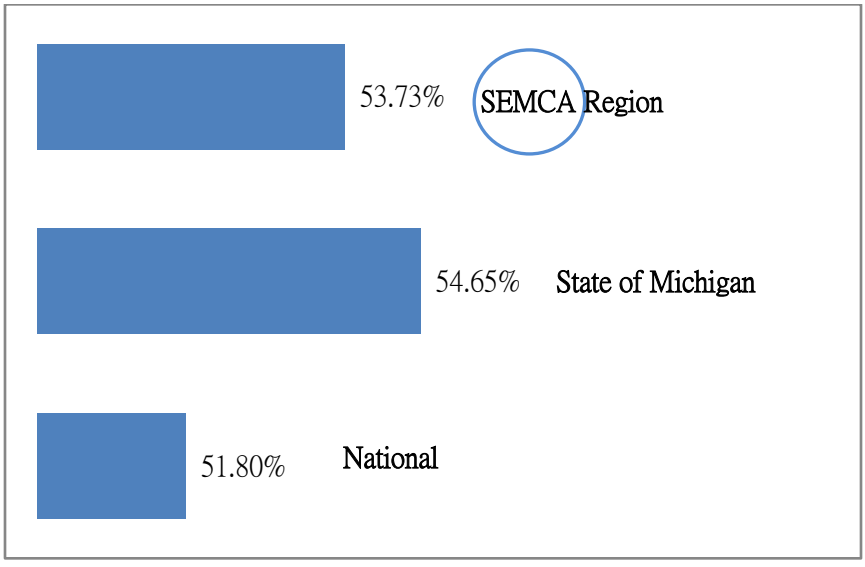
*Illicit Drug Use:* SAMHSA defines illicit drug use as the use of marijuana, cocaine, heroin, hallucinogens, and inhalants, as well as the nonmedical use of prescription-type pain relievers, tranquilizers, stimulants, and sedatives. Several drugs are grouped under the hallucinogens category, including LSD, PCP, peyote, mescaline, psilocybin mushrooms, and "Ecstasy" (MDMA). Inhalants include a variety of substances, such as nitrous oxide, amyl nitrite, cleaning fluids, gasoline, spray paint, other aerosol sprays, and glue. National rates for illicit drug use are around 9%, or about 17.4 million Americans and include rates of marijuana and prescription drug use for non-medical purposes. Rates of marijuana use and prescription drug use are detailed in the above chart, but are also included in rates of illicit drug use as they are examples of illicit drug use, according to the SAMHSA definition.

*Marijuana:* National rate for marijuana use is about 7%.

*Prescription drugs (non-medical use):* The four categories of prescription drugs included in the report by SAMHSA are pain relievers, tranquilizers, stimulants, and sedatives. These drugs cover medications that currently are, or have been, available by prescription. These drugs also include groupings that originally were prescription medications but currently may be manufactured and distributed illegally, such as methamphetamines. Respondents were asked to report only "nonmedical" use of these drugs, defined as use without a prescription of the individual's own or simply to experience the effects of the drug. Use of over-the-counter drugs and legitimate use of prescription drugs are not included in these estimates. National averages of prescription drug use are around 3%.

## Section 3.1 Alcohol Use

### Figure 3.1 Alcohol Use: National, State and Sub-state Region



As can be seen in the figure above, over half of the SEMCA population uses alcohol, which is less than the state estimates but greater than the national estimates.

### SEMCA Community Survey

A sample of Out-Wayne and Monroe County Michigan residents was randomly selected to participate in a telephone survey (See Appendix A: Primary and Secondary Data Sources for information on sampling methodology and response rates). This survey was designed to assess alcohol and drug use and abuse, residents' perceptions concerning the risks of using substances and the availability of alcohol and drugs in their communities, among others items.

As shown below, about 93% of the total sample of residents report use of alcohol in their lifetime and 51% report the use of alcohol in the last 30 days. The recent use rate is almost identical to national averages of alcohol use (51.8%) and is slightly lower than both state and southeast sub-state region reports for alcohol use. Of those who reported on their use of alcohol in Out-Wayne County, 54% report use in the last 30 days, which is higher than the national average by about 2% but is similar to state and sub-state region use rates as described above. Monroe County residents report rates of alcohol use of about 38.5%, which is significantly lower than national, state, sub-state region and Out-Wayne County resident reports.

Table 3.2 Community Survey- Alcohol Use in the last 30 days

| Variable | Total Sample N=563 | Out-Wayne County | Monroe County |
|---|---|---|---|
| Lifetime Alcohol Use | 504 (92.8%) | 422 (92.5%) | 79 (94.0%) |
| Recent Alcohol Use (past 30 days) | 255 (51.2%) | 224 (53.7%) | 30 (38.5%) |

### SEMCA Profile for Healthy Youth Data (MiPHY) – Alcohol Use

*Out-Wayne and Monroe County High Schools* . In 2010 almost 9,000 students in Out-Wayne County high schools and almost 1600 in Monroe County responded to a bi-annual school survey on health-related behaviors (MiPHY). Their responses are compared to statewide estimates, based on the Youth Behavior Risk Survey (YBRS). Out-Wayne County respondents were evenly divided between 14 years old and younger youth (25%), 15 years old (25%), 16 years old (26%) and youth 17 years old or older (24%). Over half of the students were Caucasian (53%), over one-quarter were African-American (27%), 10% were Hispanic and the remaining 10% were American Indian, Alaskan Native, Native Hawaiian, Other Pacific Islander, Asian, or of multiple races. All of the students were in the 9$^{th}$ (54%) or 11$^{th}$ (46%) grades and just over half of the sample was female (51%).

Monroe County high school students surveyed in the 2010 MiPHY were in the 9th (54%) and 11th (46%) grades. The majority were Caucasian (86%) and over half were female (52%). Almost one-third (31%) were 15 years old, one-fifth (20%) were 14 years old or younger, one-fifth (20%) were 16 years old, and just over one-quarter (28%) were 17 years old or older.

Table 3.3 High School Student Alcohol Use in last 30 days

| | YBRS | | Out-Wayne | | Monroe | |
|---|---|---|---|---|---|---|
| | | | N | % | N | % |
| 0 days | | | 6,722 | 74.9 | 1,120 | 71.0 |
| 1 or 2 days | | | 1,177 | 13.1 | 241 | 15.3 |
| 3 to 5 days | 37.0% | | 543 | 6.0 | 110 | 7.0 |
| 6 to 9 days | | | 301 | 3.4 | 66 | 4.2 |
| 10 or more days | | | 233 | 2.6 | 40 | 2.5 |
| Total | | | 8,976 | 100.0 | 1,577 | 100.0 |

- In the past 30 days, three-fourths of Out-Wayne students (75%) report no use of alcohol.
- Recent alcohol use of students in Out-Wayne County high school students (25%) is lower than the state average for youth (37%).
- In the past 30 days, just under one-third (29%) of Monroe County high school students had used alcohol. This is lower than the YRBS state average for similar youth (37%).

*Out-Wayne and Monroe County Middle Schools*. Out-Wayne County and Monroe county middle schools in this report were exclusive to youth in the 7th grade. Approximately half (49%) of the sample from Out-Wayne were 12 years old or younger, 45% were 13 years old, and the remaining 5% were 14 years of age or older. Slightly more than half were female (51%). Just over half (52%) were Caucasian, just under one-quarter were African-American (24%), and just over one-tenth were Hispanic or Latino. The remaining 13% were either American Indian, Alaskan Native, Native Hawaiian, Other Pacific Islander, Asian, or of multiple races/ethnicities.

Seventh grade students from Monroe County middle schools were included in the MiPHY survey as well. The majority of the students were male (54%) and just under two-thirds (63%) were 13 years old. Four out of five students were Caucasian, with the next largest ethnic group being Hispanic/Latino (8%).

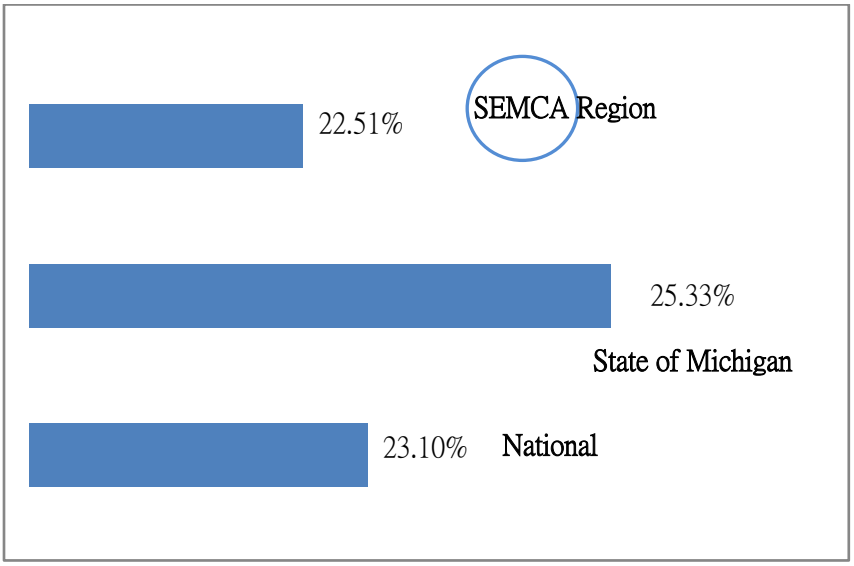
Table 3.4 Middle School Student Alcohol Use in last 30 days

| | Out-Wayne | | Monroe | |
|---|---|---|---|---|
| | N | % | N | % |
| 0 days | 4,528 | 88.6 | 1,308 | 92.6 |
| 1 or 2 days | 391 | 7.7 | 72 | 5.0 |
| 3 to 5 days | 89 | 1.7 | 18 | 1.3 |
| 6 to 9 days | 48 | 0.9 | 6 | 0.4 |
| 10 or more days | 54 | 1.1 | 9 | 0.7 |
| Total | 5,110 | 100.0 | 1,413 | 100.0 |

- In the past 30 days, about 11% of Out-Wayne County middle school students used alcohol.
- In the past 30 days, 7% of Monroe County middle school students had used alcohol.

## Section 3.2 Binge Drinking

Figure 3.2 Binge Drinking: National, State and Sub-state Region



Similar to alcohol use rates, Michigan averages for binge drinking are higher than national averages by about 2.25%. However, as can be seen in Figure 3.2, the southeastern sub-state reports rates of binge drinking that are slightly lower than the national average.

### SEMCA Community Survey

SEMCA community residents also reported rates of binge drinking in the last year. About 23% of the total sample report having engaged in binge drinking in the last year, which is similar to national rates of binge drinking in the last 30 days (23.1%). Out-Wayne county residents report rates of binge drinking that are slightly lower at 22%; therefore these residents appear to engage in binge drinking less than national, state and sub-state comparisons. However, only 116 community members responded to this item on the survey. So while Monroe's incidence of binge drinking (27.5%) is higher than national, state, sub-state and Out-Wayne County reports, one must make these comparisons with caution.

Table 3.5 Community Survey- Binge Drinking in the last 30 days

| Variable | Total Sample N=563 | Out-Wayne County | Monroe County |
|---|---|---|---|
| Binge Drinking (past year) | 116 (22.7%) | 94 (22.0%) | 22 (27.5%) |

### SEMCA Profile for Healthy Youth Data (MiPHY) – Binge Drinking

Table 3.6 Binge Drinking among Out-Wayne County and Monroe County High School Students in last 30 days

| | YBRS | | Out-Wayne | | Monroe | |
|---|---|---|---|---|---|---|
| | | | N | % | N | % |
| 0 days | | | 7,637 | 85.1 | 1,275 | 80.7 |
| 1 or 2 days | | | 705 | 7.8 | 166 | 10.5 |
| 3 to 5 days | 23.2% | | 316 | 3.5 | 83 | 5.3 |
| 6 to 9 days | | | 198 | 2.2 | 36 | 2.3 |
| 10 or more days | | | 128 | 1.4 | 19 | 1.2 |
| Total | | | 8984 | 100 | 1,579 | 100 |

- Binge drinking rates among youth are lower in Out-Wayne County high schools (15%), compared to the state average for similar youth (23%).
- Just under one-fifth (19%) of Monroe County high school students report binge drinking on at least one or more days, in the past 30 days, which is less than the state average for youth (23%).

Table 3.7 Binge Drinking among Out-Wayne County and Monroe County Middle School Students in last 30 days

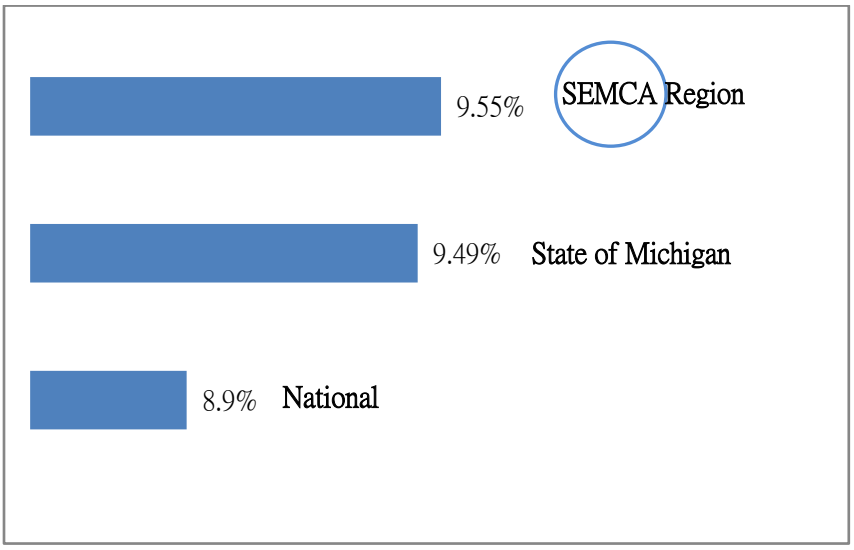
| | Out-Wayne | | Monroe | |
|---|---|---|---|---|
| | N | % | N | % |
| 0 days | 4,861 | 95.0 | 1,367 | 96.8 |
| 1 or 2 days | 153 | 3.0 | 27 | 1.9 |
| 3 to 5 days | 46 | 0.9 | 12 | 0.8 |
| 6 to 9 days | 20 | 0.4 | 3 | 0.2 |
| 10 or more days | 35 | 0.7 | 3 | 0.2 |
| Total | 5,115 | 100.0 | 1,367 | 96.8 |

- In the last 30 days only 5% of Out-Wayne middle school students report binge drinking, or having more than five drinks at a time on one or more days. Only 3% of Monroe middle school students report binge drinking or have had more than five drinks at a time on one or more days.

## Section 3.3 Illicit Drug Use

State of Michigan averages are about half of a percent higher for illicit drug use than national averages. Southeastern sub-state estimates are about equal to the state averages, about half of a percentage higher than national averages (See Figure 3.3).

Figure 3.3 National Study on Drug Use and Health Data (NSDUH) –Illicit Drug Use




## SEMCA Community Survey

Community residents who participated in the telephone survey were also asked about cocaine, heroin, marijuana and non-medical prescription drug use. Of the total sample none of the residents report the use of cocaine or heroin in the last 30 days, which is clearly lower than the national, state and sub-regional rates of use reported in the NSDUH study described above. However, as cautioned above, the total sample for the community survey is 563 residents from Out-Wayne and Monroe Counties, therefore comparisons against much larger state and national samples must be examined with consideration of sample size.

Table 3.8 Out Wayne and Monroe Community Survey-Cocaine and Heroin use in the last 30 days

| Variable | Total Sample N=563 | Out-Wayne County | Monroe County |
|---|---|---|---|
| Lifetime Use of Cocaine or Heroin | 48 (8.8%) | 39 (8.5%) | 9 (10.8%) |
| Recent Cocaine/Heroin Use (past 30 days) | 0 (0%) | 0 (0%) | 0 (0%) |

## SEMCA Profile for Healthy Youth Data (MiPHY) – Illicit Drugs

SAMHSA defines illicit drug use as the use of marijuana, cocaine, heroin, hallucinogens, inhalants and the non-medical use of prescription-type painkillers. Unlike the NSDUH data, the MiPHY data breaks-out use of

marijuana and prescription medications and painkillers from the other illicit drug categories (methamphetamines, injection, inhalants, cocaine, heroin, barbiturates, steroids and club drugs). While these substances are forms of illicit drugs, separate percentages are given for each in the MiPHY data. However, the MiPHY data is similar to the NSDUH data in its definition of most illicit drugs. NSDUH defines hallucinogens as LSD (acid), PCP, peyote, mescaline, psilocybin mushrooms, and "Ecstasy" (MDMA). Similarly the MiPHY's definition of "Club Drugs" includes drugs producing similar effects such as Ecstasy (MDMA), LSD (acid), GHB, ketamine and rohypnol. The NSDUH data defines inhalants as nitrous oxide, amyl nitrite, cleaning fluids, gasoline, spray paint, other aerosol sprays, and glue. Similarly, nitrous oxide (laughing gas, whippets) is included in the MiPHY data as an inhalant and is a sub-section of illicit drugs.

### *Out-Wayne County and Monroe High Schools*

- Tables 3.9 through 3.12 show that 0.4- 3.3% of Out-Wayne County high school students have used other forms of illicit drugs in the last 30 days, with inhalants as the illicit drug used most frequently.
- For drugs with statewide comparisons, such as club drugs, cocaine, heroin, barbiturates and steroids, Out-Wayne County high school students reported lower use rates on all.
- Tables 3.9 through 3.12 show that 0.2-2.8% of Monroe County high school students have used other illegal drugs, with inhalants as the highest illicit drug used (2.8%).
- For drugs with state comparisons, such as club drugs, cocaine, heroin, barbiturates and steroids, use among Monroe high school students is less.

Table 3.9 Illicit drug use in the last 30 days

| | Methamphetamines | | Injection/Needles | | Inhalants | |
|---|---|---|---|---|---|---|
| | Out-Wayne | Monroe | Out-Wayne | Monroe | Out-Wayne | Monroe |
| | % (n) | % (n) | % (n) | % (n) | % (n) | % (n) |
| Yes | 0.9 (82) | 1.2 (19) | 0.4 (39) | 0.2 (4) | 3.3 (322) | 2.8 (47) |
| No | 99.1 (9515) | 98.8 (1633) | 99.6 (9600) | 99.8 (1660) | 96.7 (9325) | 97.2 (1626) |
| Total | 100 (9597) | 100 (1652) | 100 (9639) | 100 (1664) | 100 (9647) | 100 (1673) |

Table 3.10 Illicit drug use in last 30 days (continued)

| | Cocaine | | | Heroin | | |
|---|---|---|---|---|---|---|
| | YBRS '09 | Out-Wayne | Monroe | YBRS'09 | Out-Wayne | Monroe |
| | % | % (n) | % (n) | % | % (n) | % (n) |
| Yes | 2.9% | 1.0 (97) | 1.1 (18) | 3.4% | 0.5 (53) | 0.4 (7) |
| No | 97.1% | 99 (9541) | 98.9 (1653) | 96.6% | 99.5 (9584) | 99.6 (1664) |
| Total | 100% | 100 (9638) | 100 (1671) | 100% | 100 (9637) | 100 (1671) |

Table 3.11 Illicit drug use in past 30 days (continued)

| | Barbiturates | | | Steroids | | |
|---|---|---|---|---|---|---|
| | YRBS '09 | Out-Wayne | Monroe | YBRS'09 | Out-Wayne | Monroe |
| | % | % (n) | % (n) | % | % (n) | % (n) |
| Yes | 5.5% | 2.0 (189) | 2.5 (42) | 3.2% | 1.3 (121) | 0.9 (15) |
| No | 94.5% | 98 (9462) | 97.5 (1632) | 96.8% | 98.7 (9522) | 99.1 (1651) |
| Total | 100% | 100 (9651) | 100 (1674) | 100% | 100 (9643) | 100 (1666) |

Table 3.12 Illicit drug use in past 30 days (continued)

| | Club Drugs | | |
|---|---|---|---|
| | YBRS '09 | Out-Wayne | Monroe |
| | % | % (n) | % (n) |
| Yes | 4.4% | 2.0 (195) | 2.3 (39) |
| No | 95.6% | 98.0 (9456) | 97.7 (1622) |
| Total | 1005 | 100 (9651) | 100 (1661) |

### *Out-Wayne County and Monroe County Middle Schools*

- Tables 3.13 through 3.15 show that 4.7- 9.5% of Out-Wayne County middle school students had used an illegal drug in the past 30 days, with inhalants being the most frequently used. Almost one-tenth of middle school students report the use of inhalants.
- Tables 3.13 through 3.15 also show that approximately 3.8- 5.6% of Monroe County middle school students have used illegal drugs in the last 30 days, with inhalants as most frequently used (5.6%).

Table 3.13 Illicit drug use in the last 30 days

| | Methamphetamines | | Injection/Needles | |
|---|---|---|---|---|
| | Out-Wayne | Monroe | Out-Wayne | Monroe |
| | % (n) | % (n) | % (n) | % (n) |
| Yes | 5.4 (282) | 4.3 (61) | 4.7 (246) | 3.8 (54) |
| No | 94.6 (4914) | 95.7 (1364) | 95.3 (4933) | 96.2 (1368) |
| Total | 100 (5196) | 100 (1425) | 100 (5179) | 100 (1422) |

Table 3.14 Illicit drug use in the last 30 days (continued)

| | Inhalants | | Cocaine | |
|---|---|---|---|---|
| | Out-Wayne | Monroe | Out-Wayne | Monroe |
| | % (n) | % (n) | % (n) | % (n) |
| Yes | 9.5 (494) | 5.6 (79) | 5.5 (287) | 4.2 (60) |
| No | 90.5 (4,685) | 94.4 (1,335) | 94.5 (4,922) | 95.8 (1,366) |
| Total | 100 (5,179) | 100 (1,414) | 100 (5,209) | 100 (1,426) |

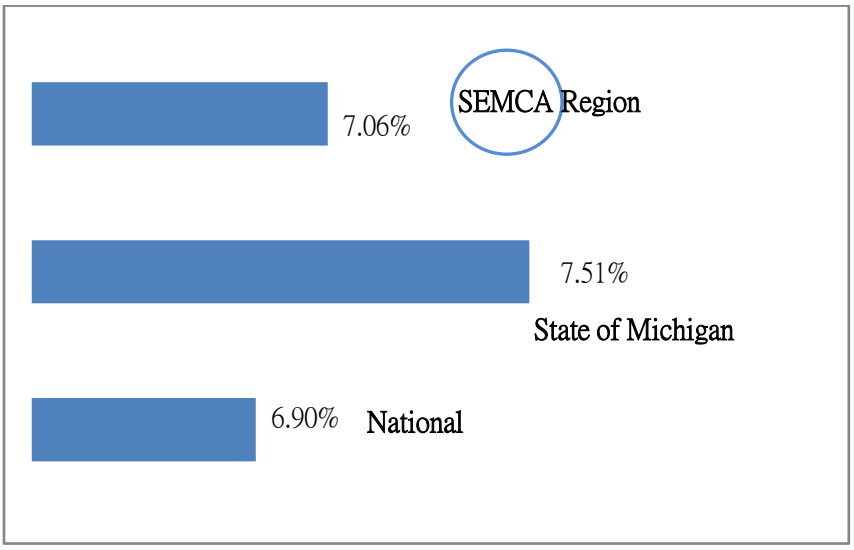
Table 3.15 Illicit drug use in the last 30 days (continued)

| | Steroids | |
|---|---|---|
| | Out-Wayne | Monroe |
| | % (n) | % (n) |
| Yes | 6.5 (336) | 4.7 (67) |
| No | 93.5 (4922) | 95.3 (1355) |
| Total | 100 (5209) | 100 (1422) |

## Section 3.4 Marijuana Use

State of Michigan averages are about half a percentage higher than the national average, similar to rates of illicit drug use, for marijuana use in the last 30 days. The southeastern sub-state estimates, however, are very similar to national averages, with about 7% reporting marijuana use.

Figure 3.4 National Study on Drug Use and Health Data (NSDUH) –Marijuana Use




## SEMCA Community Survey

Out-Wayne and Monroe county residents report rates of marijuana use that are about 2-3% less than national, state and sub-state percentages. However, when these two counties are compared, Out-Wayne county residents report rates of marijuana use that are about 1.5% higher than Monroe residents.

Table 3.16 Community Survey- Marijuana use in the last 30 days

| Variable | Total Sample N=563 | Out-Wayne County | Monroe County |
|---|---|---|---|
| Lifetime Marijuana Use | 217 (39.9%) | 186 (40.6%) | 31 (37.3%) |
| Recent Marijuana Use (past 30 days) | 20 (3.7%) | 18 (4.0%) | 2 (2.4%) |

## SEMCA Profile for Healthy Youth Data (MiPHY) – Marijuana

- Recent marijuana use in Out-Wayne County high school students (19%) is similar to the state average (21%).
- Just under one-fifth (17%) of Monroe County high school students report use of marijuana in the past 30 days, which is less than the state average (21%).

Table 3.17 Marijuana use in the last 30 days by Out-Wayne County and Monroe County High School Students

| | YBRS'09 | Out-Wayne | | Monroe | |
|---|---|---|---|---|---|
| | | N | % | N | % |
| 0 days | | 7,829 | 81.2 | 1,381 | 82.7 |
| 1 or 2 days | 20.7% | 631 | 6.6 | 96 | 5.7 |
| 3 to 5 days | | 334 | 3.5 | 44 | 2.6 |
| 6 to 9 days | | 191 | 2.0 | 40 | 2.4 |
| 10 or more days | | 645 | 6.7 | 109 | 6.5 |
| Total | | 9,630 | 100.0 | 1,670 | 100.0 |

- As shown in Table 3.18, few middle school students in Out-Wayne County report use of marijuana (3.5%) on one or more days in the past 30 days.
- Few middle school students in Monroe Count report use of marijuana (2%) in the last 30 days.

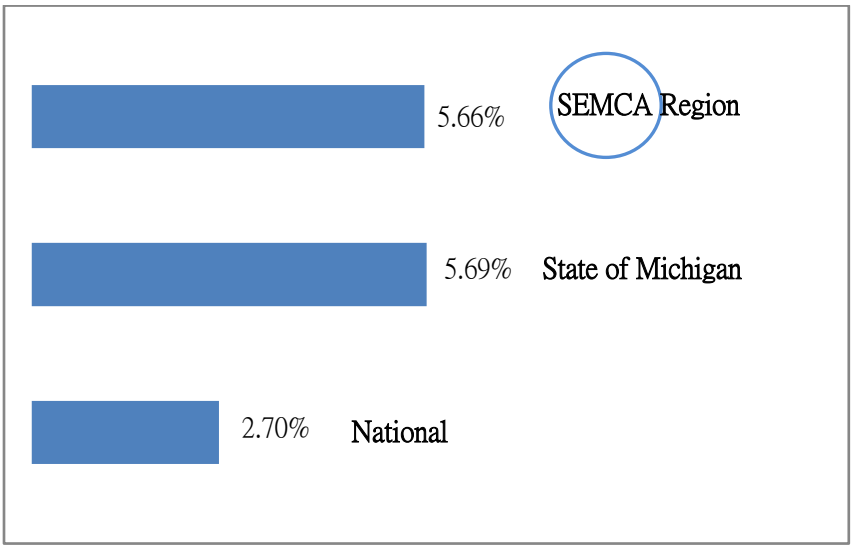
Table 3.18 Marijuana use in the last 30 days by Out-Wayne County and Monroe County Middle School Students

| | Out-Wayne | | Monroe | |
|---|---|---|---|---|
| | N | % | N | % |
| 0 days | 4,981 | 96.5 | 1,387 | 98.1 |
| 1 or 2 days | 85 | 1.6 | 15 | 1.1 |
| 3 to 5 days | 30 | 0.6 | 6 | 0.4 |
| 6 to 9 days | 17 | 0.3 | 2 | 0.1 |
| 10 or more days | 50 | 1.0 | 5 | 0.3 |
| Total | 5,163 | 100.0 | 1,415 | 100.0 |

## Section 3.5 Prescription Drug Use

State and sub-state rates of non-medical use of prescription drugs (about 5.7%) are considerably higher than national rates (2.7%). Considering the low percentage of use of prescription drugs in the national average and that state and sub-state rates are almost double, prescription drug use seems to be particularly high among Michiganders and those in the southeastern sub-state region.

Figure 3.5 National Study on Drug Use and Health Data (NSDUH) –Prescription Drug Use




## SEMCA Community Survey

Out-Wayne and Monroe county residents report rates of prescription drug use that are lower than national, state and sub-state rates. When compared, Monroe county residents report rates of prescription drug use that are slightly higher than Out-Wayne County residents.

Table 3.19 Community Survey - Non-prescription drug use in the last 30 days

| Variable | Total Sample N=563 | Out-Wayne County | Monroe County |
|---|---|---|---|
| Lifetime Non-Medical Prescription Drug Use | 72 (13.3%) | 64 (14.0%) | 8 (12.5%) |
| Recent Non-Medical Prescription Drug Use (past 30 days) | 8 (1.4%) | 6 (1.3%) | 2 (2.4%) |

## SEMCA for Healthy Youth Data (MiPHY) –Prescription Drug Use Profile

State data for prescription drug abuse is not available. Thus it is difficult to assess the levels of SEMCA youth as shown in the tables below. In the last 30 days, 5% of Out-Wayne County high school students had used prescription drugs (such as Ritalin, Adderall, or Xanax) and 9% had used painkillers (such as OxyContin, Codeine, Percocet, or Tylenol III) without a doctor's prescription. In the past 30 days, 7% of Monroe County high school students used prescription drugs (such as Ritalin, Adderall, or Xanax), and 9% used painkillers (such as OxyContin, Codeine, Percocet, or Tylenol III) without a doctor's prescription.

National data from the National Institute on Drug Abuse (NIDA) shows that prescription drugs (such as, Vicodin) abused by 12th graders in the past year decreased from 9.7% to 8.0%. However, the use of OxyContin has remained unchanged across three grades and, in fact, the use of these drugs has increased among 10th graders over the past 5 years. Additionally, the use of Adderall and over-the-counter cough and cold medicines among 12th graders remained high at 6.5% and 6.6% respectively. Therefore, prescription drug use among Out-Wayne and Monroe high schools students appears to be lower than national use rates among similar populations.

Additionally, according to Monitoring the Future (MTF), a report on substance use among youth from NIDA, the percentage of 8th graders using Amphetamines is 3.9%, 7.6% for 10th graders, and 7.4% for 12th graders, within a 30-day timeframe. The use of Ritalin among teens over the past year was 2.7% for both 10th and 12th graders, and 1.5% for 8th graders. The use of Adderall over the past year was 2.3% for 8th graders, 5.3% for 10th graders, and 6.5% of 12th graders. Over a 30-day time frame 12th graders used Sedatives (Barbiturates) at increased rates (4.8%). Other prescription drug use increased to rates of 15% over a 30-day time frame. The use of pain relievers among persons age 12 to 17 in 2010 was 9.2%. These rates are consistent with, or similar to use rates reported by Out-Wayne County and Monroe County high school and middle school youth.

Table 3.20 Prescription drug use among Out-Wayne County and Monroe County High School Students in the last 30 days

| | Out-Wayne | | Monroe | |
|---|---|---|---|---|
| | N | % | N | % |
| 0 days | 9,182 | 95.2 | 1,558 | 93.4 |
| 1 or 2 days | 239 | 2.5 | 49 | 2.9 |
| 3 to 5 days | 107 | 1.1 | 26 | 1.6 |
| 6 to 9 days | 57 | 0.6 | 17 | 1.0 |
| 10 or more days | 55 | 0.6 | 18 | 1.1 |
| Total | 9,640 | 100.0 | 1,668 | 100.0 |

Table 3.21 Painkiller use among Out-Wayne County and Monroe County High School Students in the last 30 days

| | Out-Wayne | | Monroe | |
|---|---|---|---|---|
| | N | % | N | % |
| 0 days | 8,804 | 91.4 | 1,516 | 90.7 |
| 1 or 2 days | 409 | 4.2 | 79 | 4.7 |
| 3 to 5 days | 223 | 2.3 | 42 | 2.5 |
| 6 to 9 days | 103 | 1.1 | 16 | 1.0 |
| 10 or more days | 92 | 1.0 | 18 | 1.1 |
| Total | 9,631 | 100.0 | 1,671 | 100.0 |

As seen in the tables below in the past 30 days, 7% of Out-Wayne middle school students had used prescription drugs (such as Ritalin, Adderall, or Xanax), and 16% had used painkillers (such as OxyContin, Codeine, Percocet, or Tylenol III) without a doctor's prescription.

In the past 30 days, about 7% of Monroe middle school students had used prescription drugs (such as Ritalin, Adderall, or Xanax) and 12% had used painkillers (such as OxyContin, Codeine, Percocet, or Tylenol III) without a doctor's prescription.

Table 3.22 Prescription drug use among Out-Wayne County and Monroe County Middle School Students in the last 30 days

| | Out-Wayne | | Monroe | |
|---|---|---|---|---|
| | N | % | N | % |
| Yes | 366 | 7.1 | 96 | 6.8 |
| No | 4,821 | 92.9 | 1,324 | 93.2 |
| Total | 5,187 | 100.0 | 1,420 | 100.0 |

Table 3.23 Painkiller use among Out-Wayne County and Monroe County Middle School Students in the last 30 days

| | Out-Wayne | | Monroe | |
|---|---|---|---|---|
| | N | % | N | % |
| Yes | 812 | 15.7 | 166 | 11.7 |
| No | 4,365 | 84.3 | 1,248 | 88.3 |
| Total | 5,177 | 100.0 | 1,414 | 100.0 |

Out-Wayne and Monroe county middle school students report low rates of marijuana use on average. In contrast, these students report rates of prescription painkiller, methamphetamine, injection substances, inhalants, cocaine and steroid use that is considerably higher than their high school counterparts. For example, while .9%

of Wayne County high school students report the use of methamphetamines in the last 30 days, 5.4% of middle school students in Wayne County report methamphetamine use. Results show similar variance for injection, inhalants, cocaine, heroin, prescription drugs and painkillers. Although the sample size for middle school students is lower, the higher percentages are noteworthy.

### Substance Abuse and Need for Treatment

Among persons residing the SEMCA region, NSDUH estimates that 7.53 % of the population 12 years and older has an alcohol dependence or abuses alcohol and 2.45% have an illicit drug dependence or is an abuser. Both of these estimates are lower than the state estimates reported at 7.79% and 2.88% respectively. The NSDUH also estimates the number of persons in the SEMCA region who need treatment. In 2007, 6.97% of persons aged 12 or older needed but did not receive treatment for an alcohol problem; 2.15% of persons aged 12 or older needed but did not receive treatment for illicit drug use.

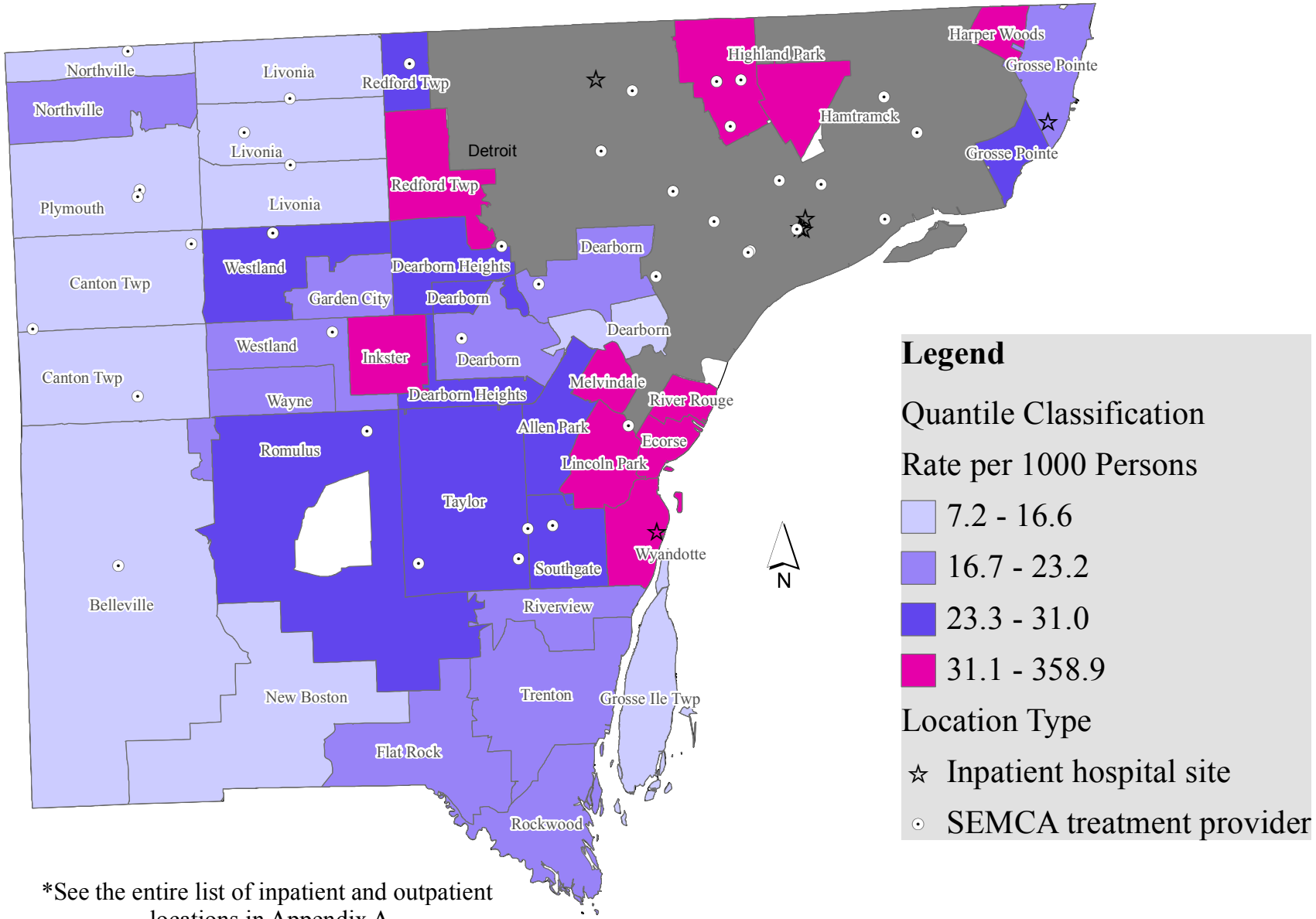
## Section 3.6 Morbidity


The consequences related to substance-use disorders present significant costs related to health care use. Hospitalizations related to alcohol and drug use are provided as a significant indicator of the problem for the SEMCA region. Data was gathered from the two largest medical healthcare systems serving residents in out-Wayne and Monroe County: the Detroit Medical Care (DMC) hospital System and Henry Ford Health System (HFHS). Data was retrieved for patients who were discharged with a mention of an alcohol or drug related issue in their diagnosis, by insurer type (third party payers and Medicaid). A total of 95 diagnosis codes were assigned between January 2007 and December of 2010. Of these, four categories were created: 1) disorder, 2) abuse, 3) dependence, and 4) Medical/Psych Co-Morbid diagnoses. See Appendix A, table A.16 for a description of morbidity data sources and how diagnosis codes were collapsed.

### Hospital Discharges for Substance Abuse Related Diagnoses

The map below shows the rates of core inpatient hospital discharges for substance-abuse related diagnoses for Out-Wayne County. The rates were classified into quartiles and show those communities with the highest rates per 1000 population (See Appendix E for rates for all zip codes in out-Wayne and Monroe counties).These communities are: Ecorse, Hamtramck, Harper Woods, Highland Park, Inkster, Lincoln Park, Melvindale, Redford Township, River Rouge, and Wyandotte. The map also includes the location of the SEMCA-funded treatment providers. These maps demonstrate the potential need for substance abuse treatment by municipality and can be compared for access to the current existing network of SEMCA treatment providers.

# *Core Inpatient Hospital Discharges Substance Abuse Related Diagnoses - Total, Out-Wayne County Zip Codes, 2007-2010




*See the entire list of inpatient and outpatient locations in Appendix A

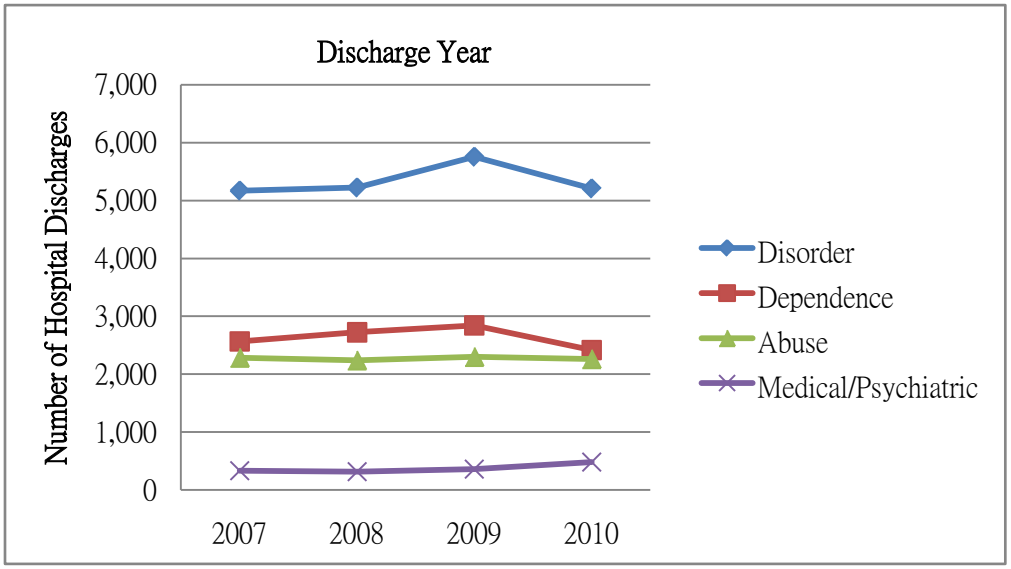
## Hospital Discharges for Sub-Types of Substance Abuse Related Diagnoses

For the purpose of the needs assessment, hospital discharge data for substance abuse related diagnosis were further classified into four types and analyzed across the four year span (2007-2010).

Table 3.24 Out-Wayne County Core Hospitalizations for Alcohol and Other Drug Related Discharge Diagnoses by Year

| | 2007 | 2008 | 2009 | 2010 | Total |
|---|---|---|---|---|---|
| Disorder | 5,170 | 5,223 | 5,754 | 5,207 | 21,354 |
| Dependence | 2,568 | 2,725 | 2,843 | 2,420 | 10,556 |
| Abuse | 2,287 | 2,240 | 2,301 | 2,263 | 9,091 |
| Medical/Psychiatric | 333 | 316 | 359 | 483 | 1,491 |

Figure 3.6 Out-Wayne County Core Hospitalizations by Year and Type

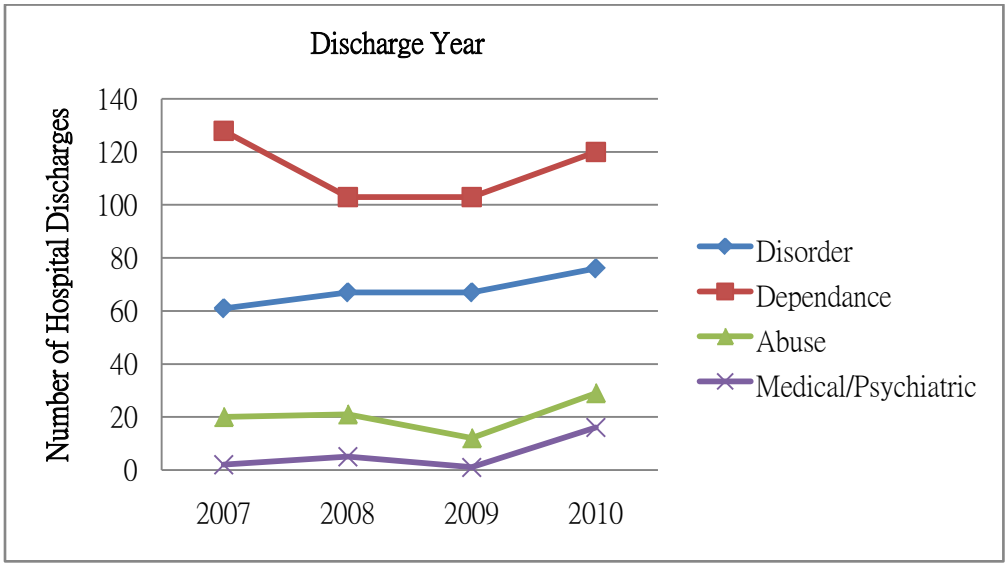



- Substance disorders have the highest number of hospital discharge diagnoses for the four years, with a significant peak in the year 2009. In 2009 there were about 500 more discharge diagnoses for substance disorder then in any other year in the four year period.
- Next, substance dependence follows a similar pattern to substance disorder diagnoses, although at a much smaller rate, with a peak in the year 2009 of about 120 additional dependence diagnoses.
- Substance abuse diagnoses are the third greatest substance-related diagnosis and rates of abuse diagnoses appear to remain relatively stable across the four years for Out-Wayne County.
- Finally, medical/psychiatric diagnoses related to substance abuse were the least frequent cause for hospitalization and the numbers remain relatively stable across the first three years, with a slight increase in 2010.

Table 3.25 Monroe County Alcohol and Other Drug Related Core Hospitalizations Principal Diagnosis by Year

| | 2007 | 2008 | 2009 | 2010 | Total |
|---|---|---|---|---|---|
| Disorder | 61 | 67 | 67 | 76 | 271 |
| Dependence | 128 | 103 | 103 | 120 | 454 |
| Abuse | 20 | 21 | 12 | 29 | 82 |
| Medical/Psychiatric | 2 | 5 | 1 | 16 | 24 |

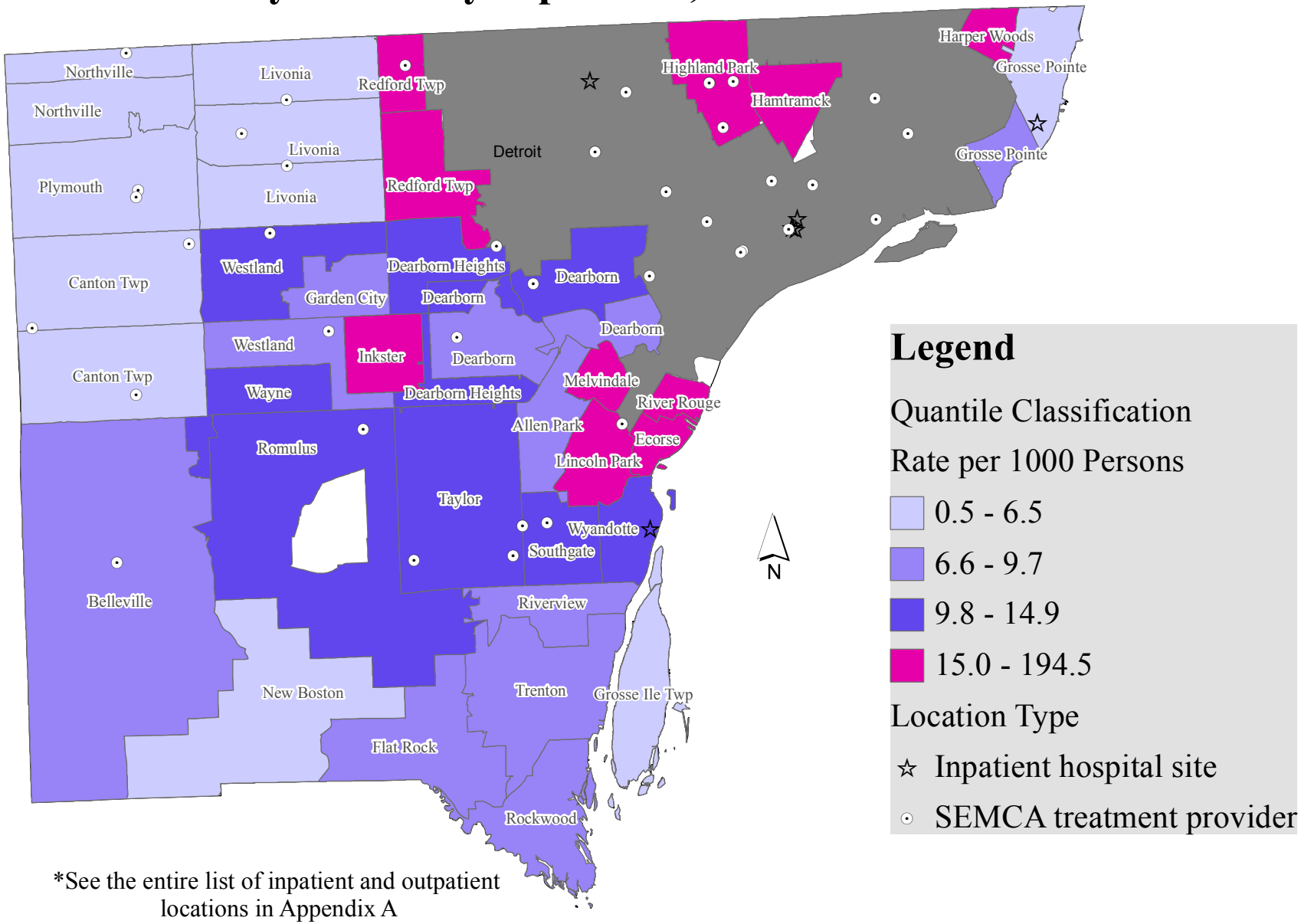
Figure 3.7 Monroe County Core Hospitalizations by Year and Type




- The table and figure above compare raw morbidity rates due to substance-related discharge diagnoses in Monroe County across the four year span, (2007-2010) for each diagnosis type.
- In contrast to Out-Wayne County, substance dependence has the highest numbers of hospital discharge diagnoses for the four years in Monroe County. Dependence diagnoses are highest in 2007 and seem to dip in 2008 and 2009, only to increase again in 2010.
- Substance disorders are the next highest diagnosis related to substance morbidity in Monroe County. Disorder diagnoses seem to be the lowest in 2007, with a slight increase remaining stable through 2008 and 2009 and the highest rates, or peak, in 2010 for the four-year period.
- Substance abuse diagnoses are the third greatest substance-related diagnosis in Monroe County. Rates for abuse diagnoses are stable from 2007 to 2008, with a notable dip in 2009, and then a notable increase during 2010.
- Finally, medical/psychiatric diagnoses related to substance use were the least frequent cause for hospitalization in Monroe County and rates follow an almost identical pattern to abuse diagnoses with a stable rate from 2007 to 2008 and a noteworthy decrease in 2009 followed by an increase in 2010.

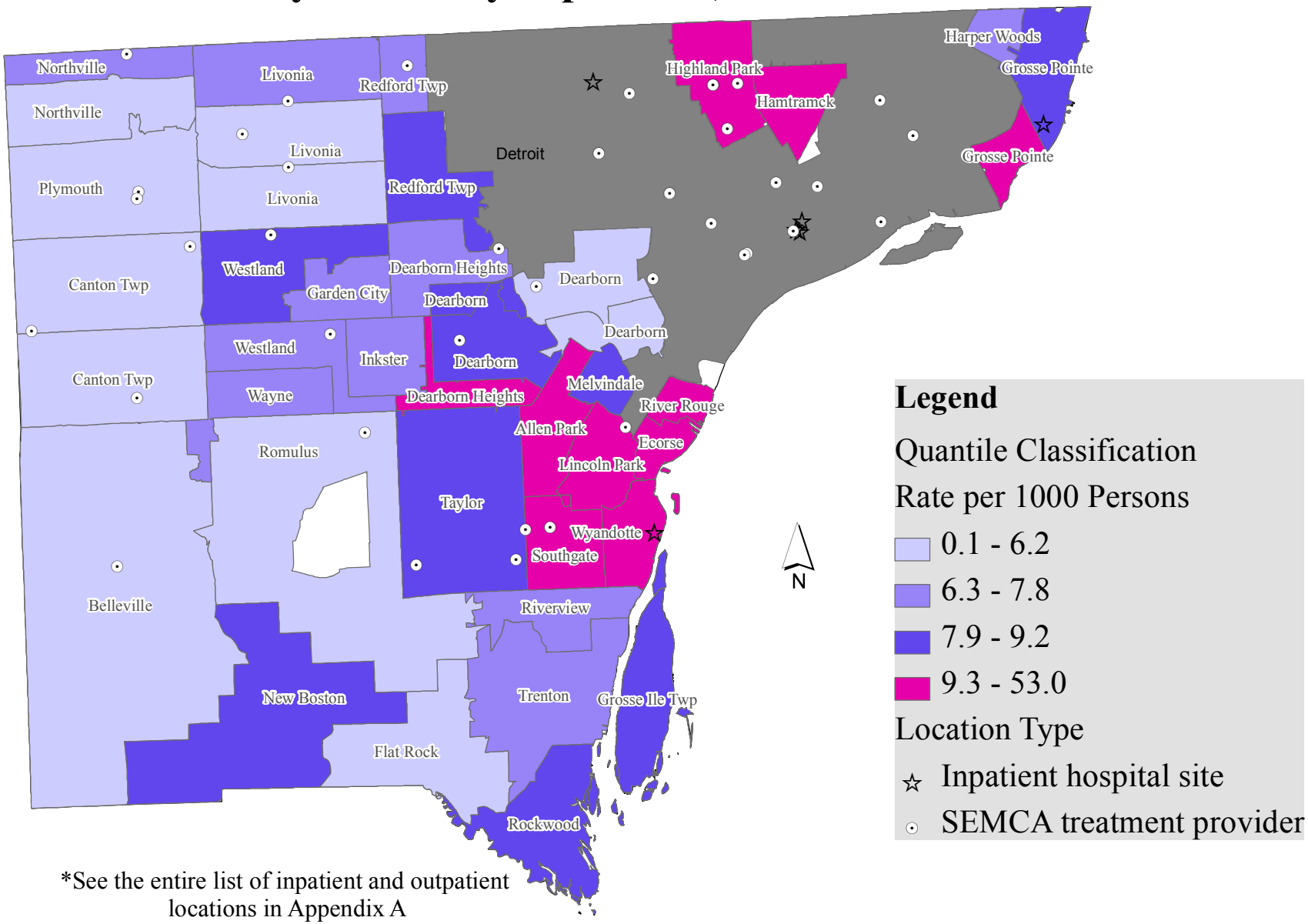
Below are four maps showing the rates of core inpatient hospital discharges for each sub classification of a substance-abuse related diagnosis for Out-Wayne County including disorder, dependence, abuse and medical psychiatric diagnoses. The rates were classified into quartiles and show those communities with the highest rates per 1000 population.

# *Core Inpatient Hospital Discharges Substance Abuse Related Diagnoses - Disorder Only, Out-Wayne County Zip Codes, 2007-2010



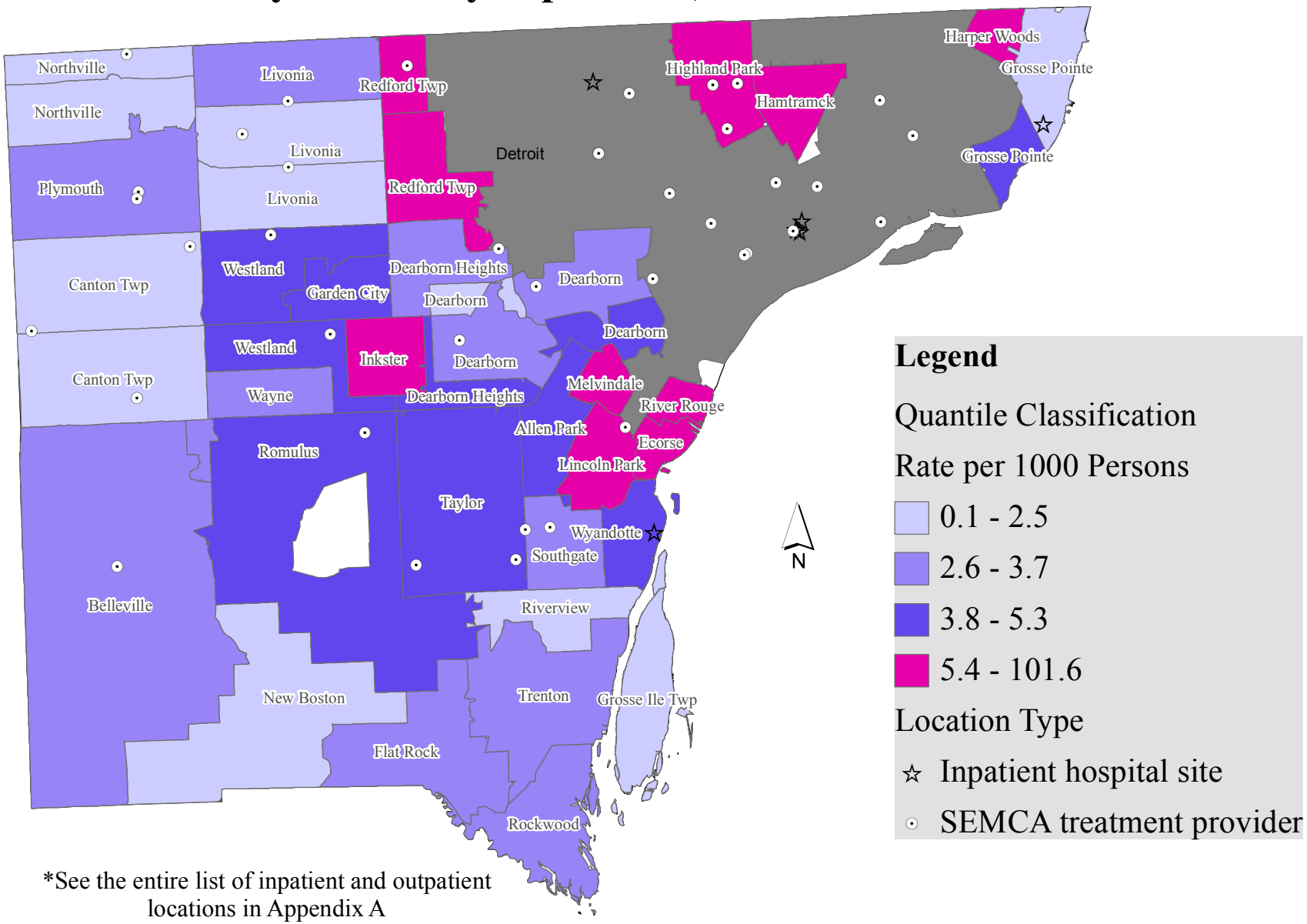

*See the entire list of inpatient and outpatient locations in Appendix A

# *Core Inpatient Hospital Discharges
# Substance Abuse Related Diagnoses - Dependence Only,
# Out-Wayne County Zip Codes, 2007-2010




*See the entire list of inpatient and outpatient locations in Appendix A

# *Core Inpatient Hospital Discharges
# Substance Abuse Related Diagnoses - Abuse Only,
# Out-Wayne County Zip Codes, 2007-2010




**Legend**

Quantile Classification

Rate per 1000 Persons

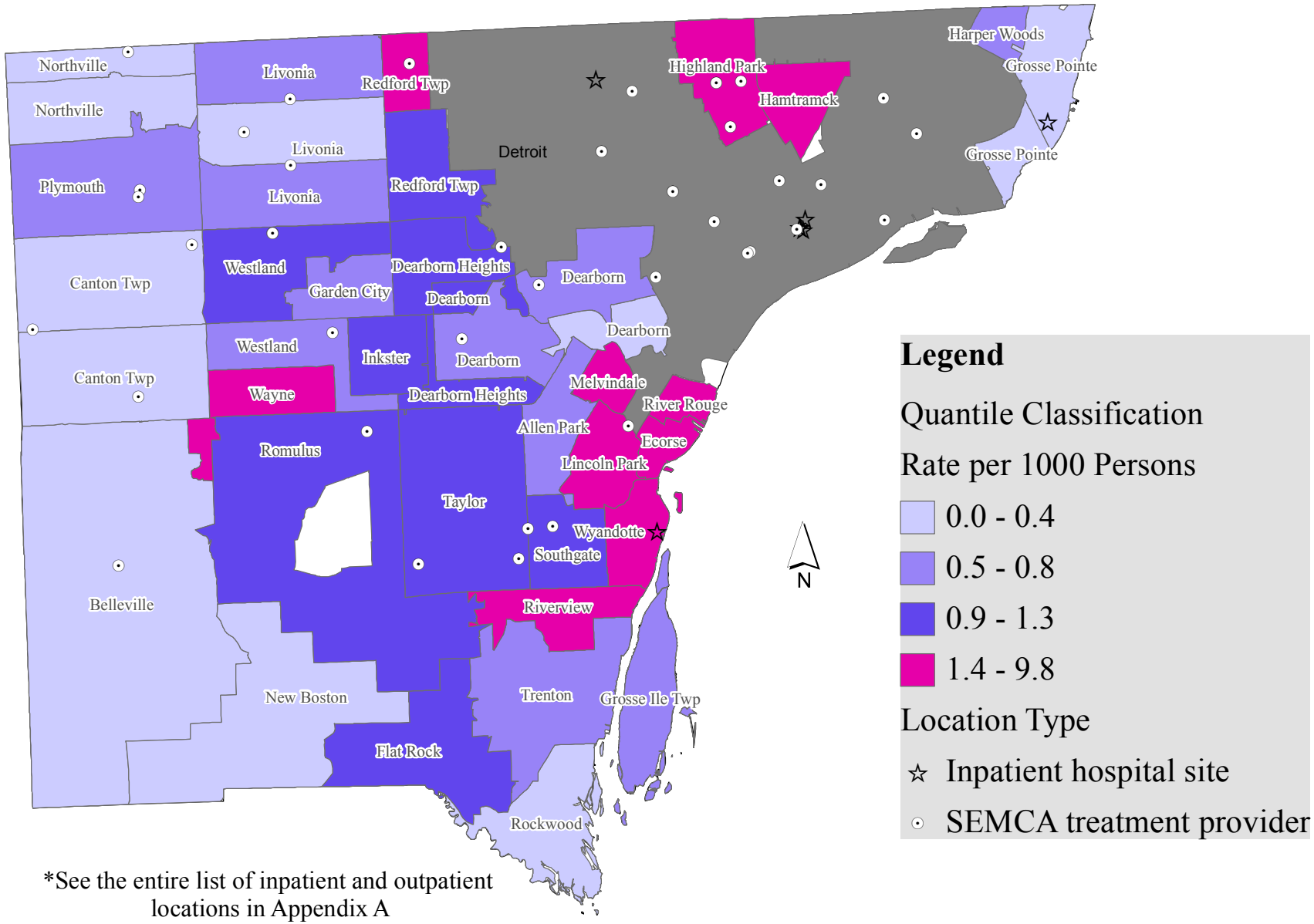
- 0.1 - 2.5
- 2.6 - 3.7
- 3.8 - 5.3
- 5.4 - 101.6

Location Type

- ☆ Inpatient hospital site
- ⊙ SEMCA treatment provider

*See the entire list of inpatient and outpatient locations in Appendix A

# *Core Inpatient Hospital Discharges
# Substance Abuse Related Diagnoses - Medical/Psychiatric Only,
# Out-Wayne County Zip Codes, 2007-2010

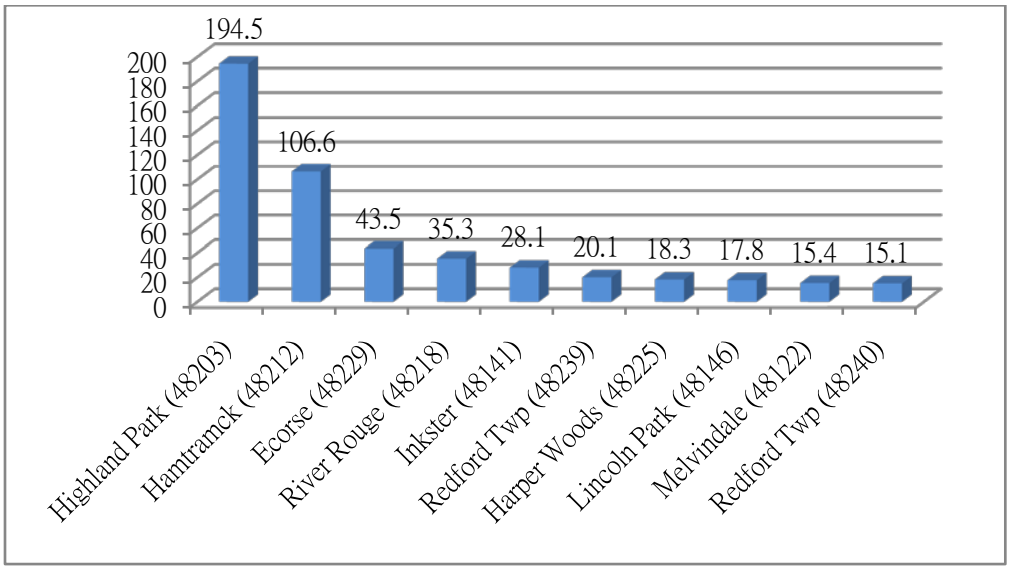



*See the entire list of inpatient and outpatient locations in Appendix A

Using quartiles can often mask the variability of the rates within each group. Thus below we have provided charts with zip codes of communities in the top quartile for each of the four sub-diagnoses: disorder, dependence, abuse and medical psychiatric diagnoses.

The figure below details the substance-disorder morbidity rates per 1000 population for the cities in the highest quartile in the SEMCA region.

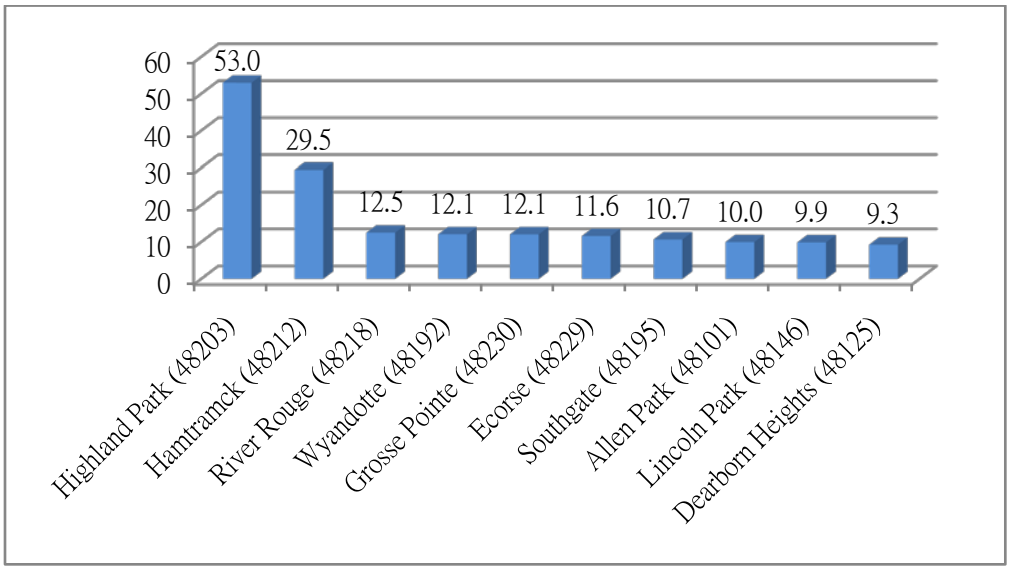
Figure 3.8 Top 10 Municipalities with Highest Rate of Substance-Disorder Discharges




- Rates for substance-disorder morbidity in the SEMCA region follow an almost identical pattern in the top quartile as substance-abuse morbidity, although rates for substance disorders are much higher in general.
- Again, Highland Park and Hamtramck are outliers in these data; with Highland Park having rates of substance-disorder morbidity that are almost double rates in Hamtramck and about four times greater than other cities with high substance-disorder morbidity rates in the SEMCA region.
- Very similar to substance-abuse morbidity, Ecorse, River Rouge, Inkster and Redford Township are in the top quartile for substance-disorder morbidity, per 1000 population.
- Additionally, Harper Woods, Lincoln Park and Melvindale are present in the top quartile for both substance-abuse and substance-disorder morbidity, but, in regards to substance-abuse morbidity, Melvindale and Lincoln Park have higher rates than Harper Woods and, as you can see from the chart above, Harper Woods has a greater number of diagnoses per 1000 population for substance-disorders.

The figure below shows the rates of substance-dependence sub-diagnoses and represents the top quartile with the highest levels in the SEMCA region.

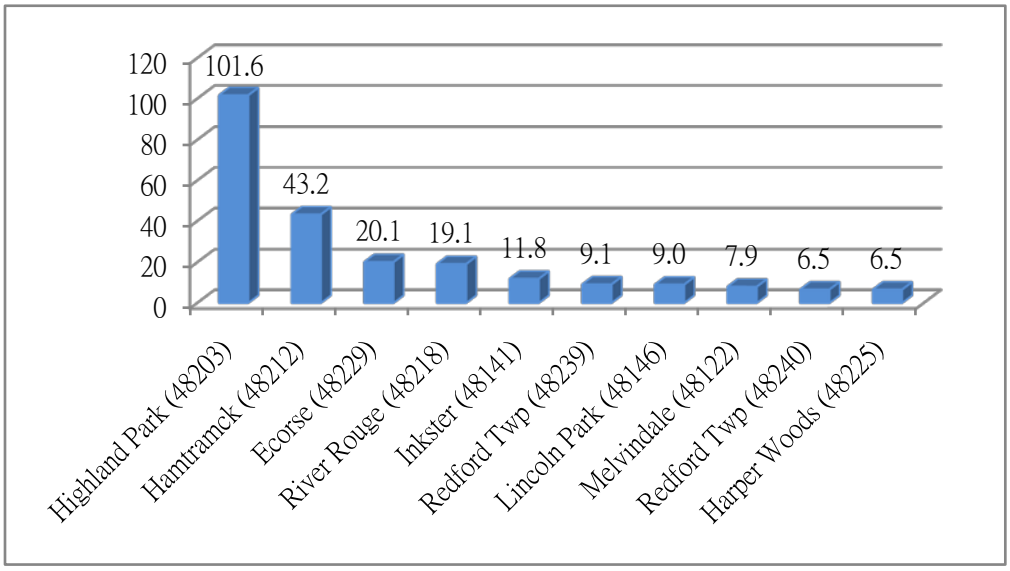
Figure 3.9 Top 10 Municipalities with Highest Rate of Substance-Dependence Discharges




- Highland Park and Hamtramck have the highest rates of substance-dependence morbidity in the SEMCA region with rates of 53 and 29.5 per 1000 population.
- However, once outliers are removed, River Rouge, Wyandotte, Grosse Pointe and Ecorse emerge as the cities with the highest rates of substance dependence morbidity per 1000 population.
- Additionally, Southgate, Allen Park, Lincoln Park and Dearborn Heights also fall in the top quartile of substance-dependence morbidity rates, with rates between 10.7 and 9.3 per 1000 population.
- Finally, Allen Park and Southgate only appear in the top quartile for substance dependence and do not appear in the top quartiles for abuse, disorder or medical/psychiatric morbidity rates per 1000 population.

The figure below portrays the top ten cities found in the top quartile for the sub-diagnosis of substance-abuse.

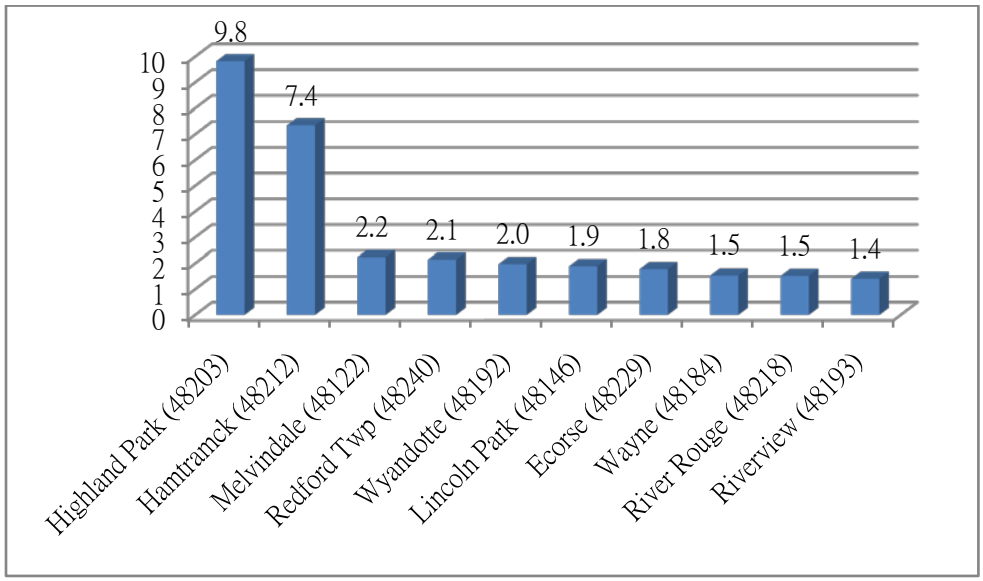
Figure 3.10 Top 10 Municipalities with Highest Rate of Substance-Abuse Discharges




- Highland Park and Hamtramck are outliers in the morbidity data in general and in regards to substance-abuse diagnoses.
- Highland Park's morbidity rate is more than double that of Hamtramck's rate. Highland Park's substance-abuse morbidity is also four times greater than rates for other cities with high levels of substance abuse morbidity per 1000 population in the SEMCA region.
- Similar to substance-dependence morbidity rates, Ecorse and River Rouge are also in the top quartile for substance-abuse morbidity rates. Additionally, Lincoln Park is in the top quartile for both substance-abuse and substance-dependence morbidity rates.
- Inkster, Redford Township, Melvindale and Harper Woods are cities that appear in the top quartile for substance-abuse morbidity but not in the top quartile for substance-dependence morbidity rates, per 1000 population.

The next figure details the sub-diagnoses of medical/psychiatric rates, per 1000 population, for the cities in the highest quartile in the SEMCA region.

Figure 3.11 Top 10 Municipalities with Highest Rate of Medical/Psychiatric Substance Discharges

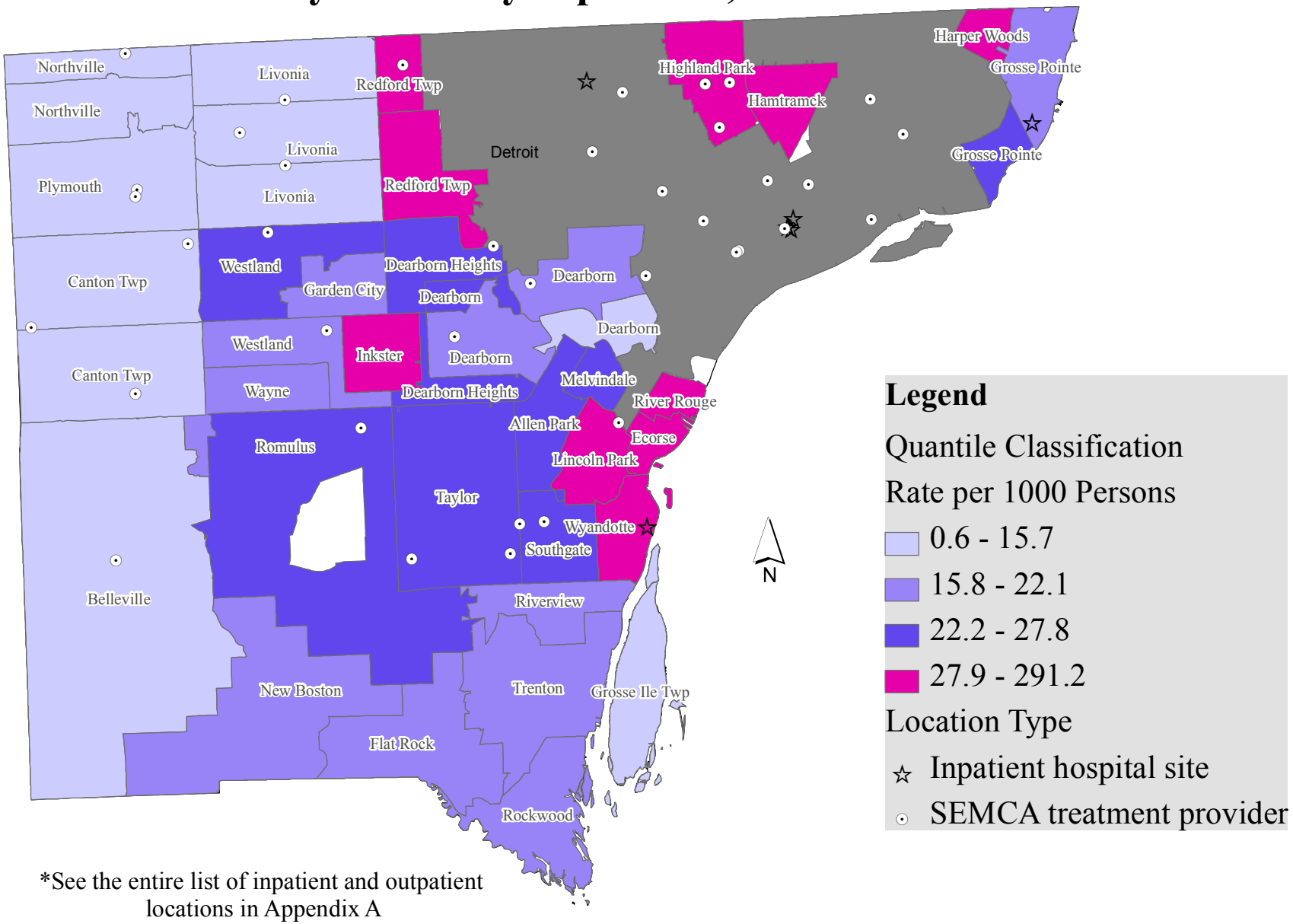



- In a pattern similar to substance abuse, disorders and dependence, Highland Park has rates of medical/psychiatric morbidity that are higher than Hamtramck and almost three times higher than other cities with high morbidity rates for medical and psychiatric diagnoses in the SEMCA region.
- Aside from Highland Park and Hamtramck (identified outliers among all morbidity rates related to substance abuse), Melvindale, Redford Township, Lincoln Park, Ecorse and River Rouge all appear in the top quartile for two or more substance-related morbidity diagnoses. Being in the top quartile for more than one of the above diagnoses identified these cities are particular areas of concern in the SEMCA region.
- Additionally, Wyandotte appears in the top quartile for both substance-dependence and medical psychiatric morbidity, but it does not appear in the top quartiles for substance-disorders or substance-abuse morbidity.
- Wayne and Riverview appear in the top quartile for substance-related medical or psychiatric morbidity, but these cities do not appear in the top substance dependence, abuse or disorder quartiles. This identifies that perhaps Wayne and Riverview are cities with needs specific to medical and psychiatric conditions and the relation of these conditions to substance-related morbidity.

## Hospital Discharges for Substance Abuse Related Diagnoses by Payer Type

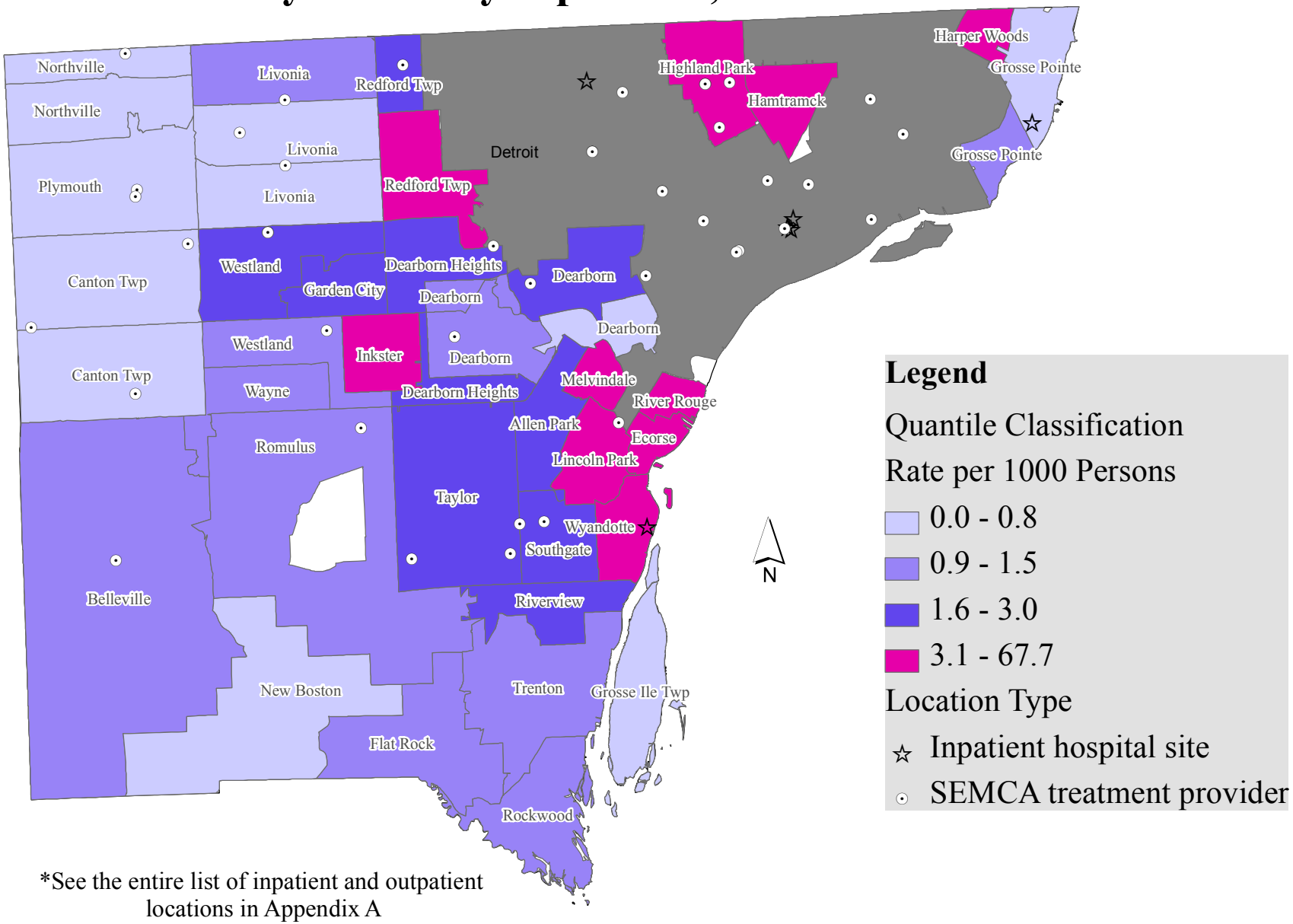
As a requirement of funding, SEMCA treatment providers must accept individuals with low incomes. As a measure of need, the hospital discharge data was further analyzed by payer type: Medicaid or third party insurers. This identifies those communities with the highest rate of discharges for substance abuse related diagnoses for those individuals with the lowest incomes. Below are maps for Out-Wayne County that show the hospitalization discharge data by zip code and type of payer (see Appendix D for data table on all municipalities by payer type for the SEMCA region).

# *Core Inpatient Hospital Discharges
# Substance Abuse Related Diagnoses - Third Party Payer Only,
# Out-Wayne County Zip Codes, 2007-2010




*See the entire list of inpatient and outpatient locations in Appendix A

# *Core Inpatient Hospital Discharges Substance Abuse Related Diagnoses - Medicaid Only, Out-Wayne County Zip Codes, 2007-2010




*See the entire list of inpatient and outpatient locations in Appendix A

## Section 3.7 Treatment Consumers

SEMCA is committed to providing accessible, quality treatment and funds 29 different providers with locations throughout the two-county area, including Detroit. Any provider that receives funding from SEMCA must report treatment data, via Care Net, for those clients seen through the public system. For the needs assessment, the researchers gathered three years (FY 2007/2008 through FY 2009/2010) of de-identified treatment data from SEMCA, including screening, SARF, admission, assessment, utilization and discharge files. We used three levels of analysis to understand the patterns of residents seeking substance abuse treatment. Admission data, treatment episodes and individuals reflect any time an individual enters treatment or changes to another level. Thus admission data do not reflect a unique client, since some clients have multiple admissions. There were 17,774 admissions in the three-year period. Data revealed that approximately 44% of clients have been admitted more than once. The second level of analysis focused on episodes, which capture those incidences in which a client was admitted and continued with treatment until a new screening showed up for the same case. In this instance multiple admissions were grouped into a single episode, as long as they all occurred subsequent to the same screening. There were 11,792 episodes. Almost two-thirds (65.7%) has only one admission within an episode. Finally, data was examined by individuals. Those cases refer to unique individuals whether or not they were admitted for treatment more than once a year. As shown in table 3.26, a total of 9,106 unique individuals received treatment between 2008 and 2010. Individuals treated by SEMCA providers averaged 1.3 episodes and 2 admissions.

### Treatment Episodes

Table 3.26 Number of Treatment Episodes 2008-2010 (N=9106)

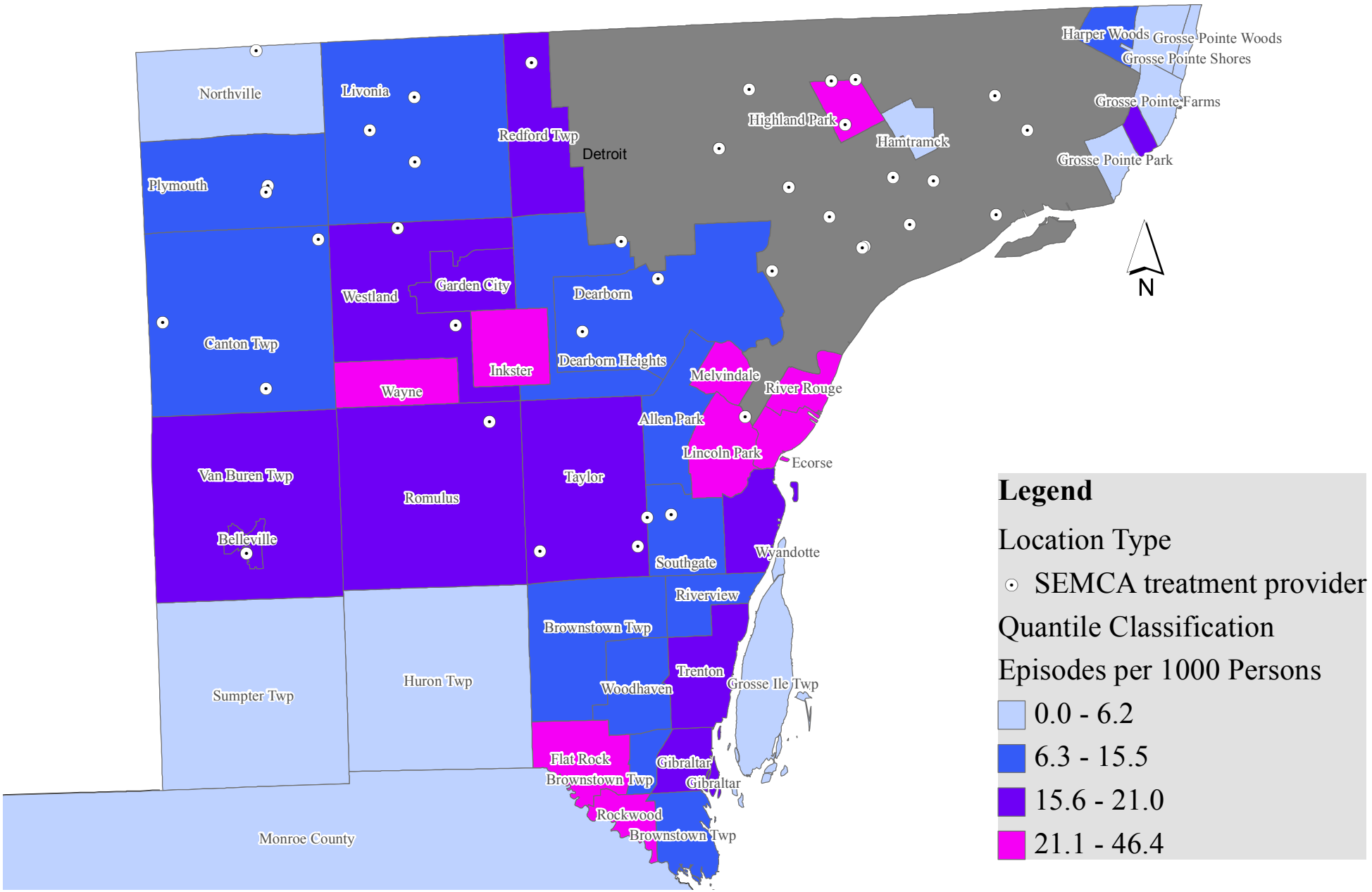
| Number of treatment episodes | N | % |
|---|---|---|
| - 1 | 7200 | 79.1% |
| - 2 | 1373 | 15% |
| - 3 | 361 | 4% |
| - 4 | 117 | 1.3% |
| - 5 | 42 | 0.5% |
| - 6 | 9 | 0.13% |
| - 7 | 2 | 0.03% |
| - 8 | 2 | 0.03% |

- The average number of treatment episodes for the SEMCA treatment population is 1.29 per individual
- Most individuals served in the SEMCA region experience one treatment episode (79%); a little over 15% had two treatment episodes.

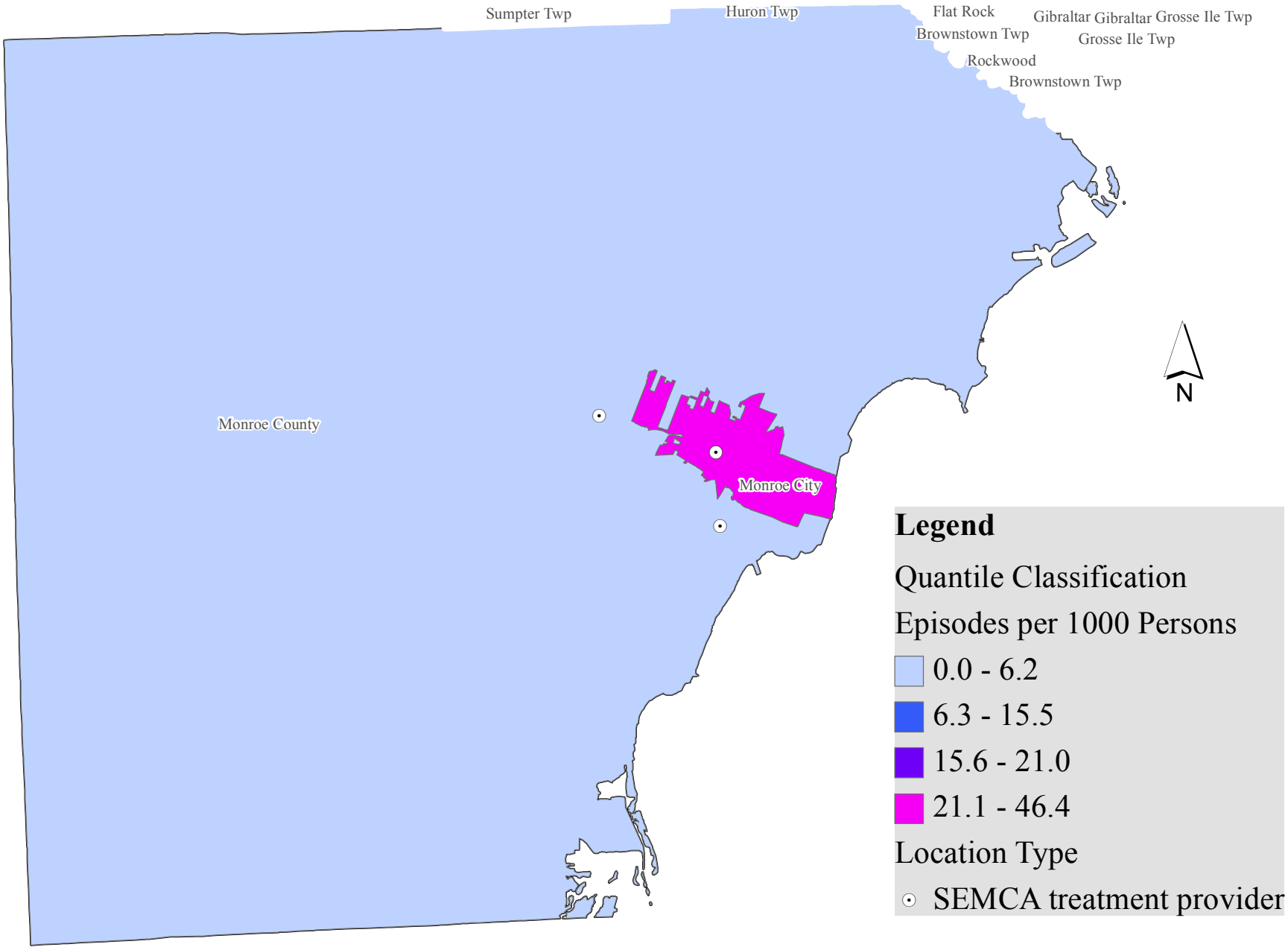
- Less than 6% of the population in treatment in the SEMCA region report more than 2 treatment episodes.

The number of treatment episodes per city, based on Care Net data and population rates from the 2010 census for each city in the SEMCA region were classified into quartiles and displayed in the maps below (see Appendix C for complete listing of treatment episodes by Out-Wayne County cities). Highland Park has the greatest number of treatment episode per 1000 population, with 36 treatment episodes; Ecorse, Flat Rock and Rockwood have the next greatest number of treatment episodes per 1000 population with rates of approximately 30, 27 and 26, respectively.

# SEMCA Treatment Episodes, 2007-2010



# SEMCA Treatment Episodes
# Monroe County, 2007-2010



## Consumer Demographics Based on First Admission (n=9,106)

The table below provides gender, race and age by primary substance of abuse.

### Table 3.27 Primary Substance by Gender, Race and Age

| Variable | Primary Substance | | | | |
|---|---|---|---|---|---|
| | Alcohol | Cocaine | Cannabis | Opiates | Other |
| Gender | | | | | |
| - Male | 2327 (41.9%) | 554 (10%) | 947 (17%) | 1616 (29.1%) | 114 (2%) |
| - Female | 1226 (35.9%) | 536 (15.7%) | 412 (12.0%) | 1134 (33.2%) | 109 (3.2%) |
| Race | | | | | |
| - Black | 648 (39.2%) | 345 (20.8%) | 310 (18.7%) | 340 (20.5%) | 12 (0.8%) |
| - White | 2687 (39.6%) | 695 (10.2%) | 937 (13.8%) | 2269 (33.4%) | 197 (3%) |
| - Other | 185 (39.3%) | 47 (10%) | 105 (22.3%) | 124 (26.3%) | 10 (2.1%) |
| | M (SD) | M (SD) | M (SD) | M (SD) | M (SD) |
| Age at First Admission | 36.0 (11.3) | 38.3 (9.1) | 24.0 (8.4) | 33.5 (11.5) | 29.1 (10.7) |

- Among males in treatment, their primary drug of choice appears to be alcohol (41.9%), with opiates as the second most common drug of choice (29.1%)
- Among females in treatment, their drug of choice seems primarily to be alcohol (35.9%) or opiates (33.2%). Females in treatment appear to have opiates as a drug of choice slightly more often than males.
- Among African-American, or Black, individuals in treatment, their primary drug of choice appears to be alcohol (39.2%) with cocaine (20.8%) and opiates (20.5%) as their second drug of choice with almost identical margins.
- Among White individuals in treatment, their primary drug of choice is alcohol (39.6%) and their second drug of choice is opiates (33.4%). White individuals in treatment identify the use of drugs, such as cocaine, cannabis and "other drugs" infrequently, compared to African-American clients, who appear to use cocaine and cannabis as drugs of choice more often than White clients.
- Individuals in treatment who identified their race as "other" indicate a primary drug of choice of alcohol (39.3%) with opiates (26.3%) and cannabis (22.3%) as close secondary choices.
- Across gender and race, alcohol is the primary drug of choice and opiates are the secondary drug of choice for most individuals in treatment.
- Individuals in treatment who prefer cannabis as their primary drug of choice appear to have a younger age (24 years) at first admission.
- Individuals in treatment who prefer cocaine (38 years) or alcohol (36 years) as their primary drug of choice appear to be older at first admission.

- The average age range for all individuals in treatment at first admission spans from 24 years, with a standard deviation of 8 years, to 38 years, with a standard deviation of 9 years. Therefore, individuals in the SEMCA system are between 16 and 47 years old at their first admission.

Table 3.28 Treatment Population Demographics

| Variable | |
|---|---|
| Number of Episodes – Mean (StDev) | 1.29 (0.67) |
| Number of Admissions – Mean (StDev) | 1.95 (1.57) |
| Gender | |
| - Male | 5,631 (61.8%) |
| - Female | 3,475 (38.2%) |
| Race | |
| - 1: Native American | 69 (0.76%) |
| - 2: Asian or Pacific Islander | 20 (0.22%) |
| - 3: African American/Black | 1680 (18.57%) |
| - 4: White | 6891 (76.18%) |
| - 5: Hispanic | 197 (2.08%) |
| - 6: Multi-Racial | 94 (1.04%) |
| - 8: Arab American | 95 (1.05%) |
| Marital Status | |
| - 1: Never Married | 6107 (67.1%) |
| - 2: Married/Cohabiting | 929 (10.2%) |
| - 3: Widowed | 113 (1.2%) |
| - 4: Divorced | 1451 (15.9%) |
| - 5: Separated | 506 (5.6%) |
| Employment Status | |
| - 1: Employed, Full-Time | 677 (7.4%) |
| - 2: Employed, Part-Time | 1071 (11.8%) |
| - 3: Unemployed | 5956 (65.4%) |
| - 4: Not in the competitive labor force | 1218 (13.4%) |
| - 6: Retired from Work | 0 (0.0%) |
| - 8: Not Applicable to the person | 184 (2.0%) |
| County of Residence | |
| - Wayne County | 8338 (91.6%) |
| - Monroe County | 740 (8.1%) |
| - Other County | 28 (0.3%) |

- As detailed above the average number of treatment episodes is 1.29 and the average number of treatment admissions is 1.95.
- Males make up about two-thirds of the individuals in treatment.
- Caucasian, or White individuals, make up the largest racial group in treatment, (76%) with African-American or Black consumers as the next greatest racial proportion (18.6%).

- Individuals in treatment are most likely to have never been married (67%) or to be divorced (16%).
- About 10% of individuals in treatment are married or cohabitating, approximately 6% report being separated and a little over 1% report being widowed.
- Over 65% of individuals in treatment are unemployed and about 13% report not being in the competitive labor force, or not currently looking for work.
- About 12% of those in treatment are employed part-time and a little over 7% are employed full-time.
- Of consumers in treatment in the SEMCA region, almost 92% reside in Out-Wayne County with about 8% residing in Monroe County.

## Trends and Demographic Data for Individuals in Treatment

To make comparisons over the three-year period, we examined data for individuals, based on their first admission. Chi-square analysis was conducted and no differences were found over time, based on gender, race, education, involvement in child welfare and drug courts, mental health issues, or number of arrests.

Table 3.29 Demographic Characteristics by Year

| Demographic Characteristic | Total Population N=9,106 (%) | Admission Year | | |
|---|---|---|---|---|
| | | FY 07-08 n=3,678 | FY 08-09 n=2,889 | FY 09-10 n=2,539 |
| Gender | | | | |
| Male | 5631 (61.8) | 2262 (61.5) | 1814 (62.8) | 1555 (61.2) |
| Female | 3475 (38.2) | 1416 (38.5) | 1075 (37.2) | 984 (38.8) |
| Race | | | | |
| White | 6887 (75.6) | 683 (18.6) | 504 (17.4) | 492 (19.4) |
| Black | 1679 (18.4) | 2787 (75.8) | 2201 (76.2) | 1899 (74.8) |
| Other | 540 ( 5.9) | 208 (5.7) | 184 (6.4) | 148 (5.8) |
| Age | 33.6 (11.6) | 34.1 (11.5) | 33.3 (11.5) | 33.1 (11.8) |
| Marital Status | | | | |
| Never Married | 6107 (67.1) | 2415 (65.7) | 1945 (67.3) | 1747 (68.8) |
| Married/Cohabiting | 929 (10.2) | 355 (9.6) | 296 (10.2) | 278 (10.9) |
| Widowed | 113 (1.2) | 51 (1.4) | 35 (1.2) | 27 (1.1) |
| Divorced | 1451 (15.9) | 651 (17.7) | 447 (15.5) | 353 (13.9) |
| Separated | 506 (5.6) | 206 (5.6) | 166 (5.8) | 134 (5.3) |
| Number of Dependents | | | | |
| 0 | 1319 (14.5) | 143 (3.9) | 377 (13.0) | 799 (31.5) |
| 1 | 5358 (58.8) | 2526 (68.7) | 1687 (58.4) | 1145 (45.1) |
| 2 | 1066 (11.7) | 424 (11.5) | 360 (12.5) | 282 (11.1) |
| 3+ | 1363 (15.0) | 585 (15.9) | 465 (16.1) | 313 (12.3) |

| Demographic Characteristic | Total Population N=9,106 (%) | Admission Year | | |
|---|---|---|---|---|
| | | FY 07-08 n=3,678 | FY 08-09 n=2,889 | FY 09-10 n=2,539 |
| Child Welfare Involvement | | | | |
| Yes | 359 (3.9) | 163 (4.4) | 98 (3.4) | 98 (3.9) |
| No | 8747 (96.1) | 3515 (95.6) | 2791 (96.6) | 2441 (96.1) |
| Employment | | | | |
| Full-time | 677 (7.4) | 312 (8.5) | 215 (7.4) | 150 (5.9) |
| Part-time | 1071 (11.8) | 472 (12.8) | 353 (12.2) | 246 (9.7) |
| Unemployed | 5956 (65.4) | 2504 (68.1) | 1854 (64.2) | 1598 (62.9) |
| Not in labor force | 1218 (13.4) | 299 (8.1) | 411 (14.2) | 508 (20.0) |
| Retired | 184 (2.0) | 91 (2.5) | 56 (1.9) | 37 (1.5) |
| Education | | | | |
| <= 8th grade | 420 (4.6) | 160 (4.3) | 136 (4.7) | 124 (4.9) |
| 9-11th grade | 2803 (30.8) | 1157 (31.5) | 877 (30.4) | 769 (30.3) |
| 12th grade | 3817 (41.9) | 1533 (41.7) | 1260 (43.6) | 1024 (40.3) |
| >12 - <16 years | 1751 (19.2) | 695 (18.9) | 533 (18.4) | 523 (20.6) |
| 16+ (BS/BA/Grad) | 315 (3.5) | 133 (3.6) | 83 (2.9) | 99 (3.9) |
| Annual Income | | | | |
| $0 | 3034 (33.3) | 1095 (29.8) | 948 (32.8) | 991 (39.0) |
| $1-$7k | 2952 (32.4) | 1423 (38.7) | 898 (31.1) | 631 (24.9) |
| >$7k | 3116 (34.2) | 1158 (31.5) | 1041(36.1) | 917 (36.1) |
| Service Category | | | | |
| Outpatient | 4065 (44.6) | 1742 (47.4) | 1318 (45.6) | 1005 (39.6) |
| Residential-Detox | 2396 (26.3) | 812 (22.1) | 831 (28.8) | 753 (29.7) |
| Resid.-Short Term | 832 (9.1) | 409 (11.1) | 188 (6.5) | 235 (9.3) |
| Resid.-Long Term | 43 (0.5) | 16 (0.4) | 11 (0.4) | 16 (0.6) |
| Intensive Outpt. | 1770 (19.4) | 699 (19.0) | 541 (18.7) | 530 (20.9) |
| Referral Source | | | | |
| Self | 6365 (71.5) | 2672 (76.2) | 2055 (71.4) | 1638 (65.0) |
| CJ Referral | 1128 (12.7) | 408 (11.6) | 350 (12.2) | 370 (14.7) |
| Other | 1411 (15.8) | 427 (12.2) | 473 (16.4) | 511 (20.3) |
| Admission LOS | 58.0 (83.8) | 64.2 (98.9) | 58.1 (78.2) | 48.9 (62.6) |
| Number of Prior Treatments | | | | |
| 0 | 3701 (40.6) | 1286 (35.0) | 1228 (42.5) | 1187 (46.8) |
| 1 | 2258 (24.8) | 957 (26.0) | 708 (24.5) | 593 (23.4) |

| Demographic Characteristic | Total Population N=9,106 (%) | Admission Year | | |
|---|---|---|---|---|
| | | FY 07-08 n=3,678 | FY 08-09 n=2,889 | FY 09-10 n=2,539 |
| 2 | 1184 (13.0) | 524 (14.3) | 361 (12.5) | 299 (11.8) |
| 3 | 706 (7.8) | 333 (9.1) | 207 (7.2) | 166 (6.5) |
| 4+ | 1257 (13.8) | 578 (15.7) | 385 (13.3) | 294 (11.6) |
| Drug Court Client(Admissions Record) | | | | |
| Yes | 271 (3.0) | 99 (2.7) | 82 (2.8) | 90 (3.5) |
| No | 8835 (97.0) | 3579 (97.3) | 2807 (97.2) | 2449 (96.5) |
| Mental Health Issues (at admission) | | | | |
| Yes | 4360 (47.9) | 1712 (46.5) | 1409 (48.8) | 1239 (48.8) |
| No | 4746 (52.1) | 1966 (53.5) | 1480 (51.2) | 1300 (51.2) |
| Mental Health Status (at discharge) | | | | |
| None | 4608 (50.6) | 1959 (53.3) | 1388 (48.0) | 1261 (49.7) |
| Mild/Moderate | 4112 (45.2) | 1545 (42.0) | 1392 (48.2) | 1175 (46.3) |
| High | 386 (4.2) | 174 (4.7) | 109 (3.8) | 103 (4.1) |
| # Arrests past 5 years | | | | |
| 0 | 2909 (32.0) | 1123 (30.5) | 886 (30.7) | 900 (35.5) |
| 1 | 2552 (28.0) | 1046 (28.4) | 817 (28.3) | 689 (27.15) |
| 2 | 1618 (17.8) | 654 (17.8) | 539 (18.7) | 425 (16.75) |
| 3 | 860 (9.4) | 377 (10.3) | 267 (9.2) | 216 (8.5) |
| 4+ | 1165 (12.8) | 477 (13.0) | 380 (13.1) | 308 (12.1) |
| # Arrests past 30 days | | | | |
| 0 | 8059 (88.5) | 3257 (88.6) | 2571 (89.0) | 2231 (87.9) |
| 1 | 890 (9.8) | 361 (9.8) | 269 (9.3) | 260 (10.2) |
| 2+ | 157 (1.7) | 60 (1.6) | 49 (1.7) | 48 (1.9) |
| Injecting Drug Use | | | | |
| Yes | 1310 (14.4) | 471 (12.8) | 440 (15.2) | 399 (15.7) |
| No | 7796 (85.6) | 3207 (87.2) | 2449 (84.8) | 2140 (84.3) |
| Primary Substance (from assessment) | | | | |
| Alcohol | 3553 (39.6) | 1424 (39.5) | 1173 (41.0) | 956 (38.2) |
| Cocaine | 1090 (12.1) | 585 (16.2) | 287 (10.0) | 218 (8.7) |
| Cannabis | 1359 (15.1) | 514 (14.2) | 442 (15.4) | 403 (16.1) |

| Demographic Characteristic | Total Population N=9,106 (%) | Admission Year | | |
|---|---|---|---|---|
| | | FY 07-08 n=3,678 | FY 08-09 n=2,889 | FY 09-10 n=2,539 |
| Opiates | 2750 (30.6) | 1009 (28.0) | 886 (31.0) | 855 (34.1) |
| Other | 223 (2.5) | 76 (2.1) | 75 (2.6) | 72 (2.9) |

- Individuals in treatment appear to be more likely to be unemployed, with 68-63% of consumers being unemployed during the period 2007-2010.
- However, the proportion of patients in treatment who were employed either full- or part- time or unemployed all decreased slightly across the years.
- Individuals in treatment are mostly likely to have completed between a 9th and 12th grade education; about 70% of consumers indicate an educational status of 9-11th grade or 12th grade.
- Approximately 18.4-20.6% of consumers indicate having had post-high school education.
- Individuals in treatment are more likely to have lower income levels. Most report incomes of $1,000 to $7,000 in 2007-2008, while in subsequent years the majority of individuals report incomes above $7,000; this indicates a slight increase in income among the treatment population.
- Most individuals are consumers of outpatient treatment, with 39.6- 47.4% of consumers falling into this service category. Second highest category for services across years is Residential Detox, followed by intensive outpatient across treatment years (2007-2010).
- Consumers are more likely to be self referred (65-76%) and less likely to enter treatment from the CJ or other systems. While self referral remains the largest category for referral source, the category tapered off from 76% in 07-08 to 65% in 09-10.
- The majority of individuals in treatment have had 1 or zero previous treatments; across years about 65-70% of individuals indicate having no, or one, previous treatment episode.
- About 11-15% of individuals in treatment have had multiple (4+) treatment episodes.
- The majority of individuals in treatment are not drug court clients. From 2007-2010 about 2.7-3.5% of individuals in treatment are drug court clients at treatment admission.
- Many individuals in treatment have mental-health issues identified at admission; in fact almost half of all individuals in treatment appear to have mental-health issues.
- Slightly less than half of individuals in treatment leave treatment with a mild to moderate mental-health diagnosis. Additionally, slightly less than half leave treatment with no mental-health diagnosis and the minority (about 3.8-4.7%) leaves treatment with a high (or severe) mental-health diagnosis.
- Around 30.5-35.5% of individuals in treatment have had no arrests in the past 5 years, while about 27-28.4% of clients have had one arrest and around 16-18.7% have had 2 arrests.
- Most individuals in treatment have had no arrests in the past 30 days (87.9-89%). Around 9-10% have had one arrest in the last 30 days and very few (1.6-1.9%) have had two or more arrests.

- Around 12.8-15.7% of individuals in treatment are intravenous drug users. While this proportion is relatively low, it should be noted that this percentage has increased every year from 12.8% in 2007-2008 treatment year to 15.7% in the 2009-2010 treatment year.
- Most individuals in treatment report alcohol (38.2-41%) or opiates (28-34.1%) as their primary substance of use during their assessment.
- It should be noted that alcohol use as the primary substance seems to fluctuate from year to year and opiates, as the primary substance of use, has gone up.

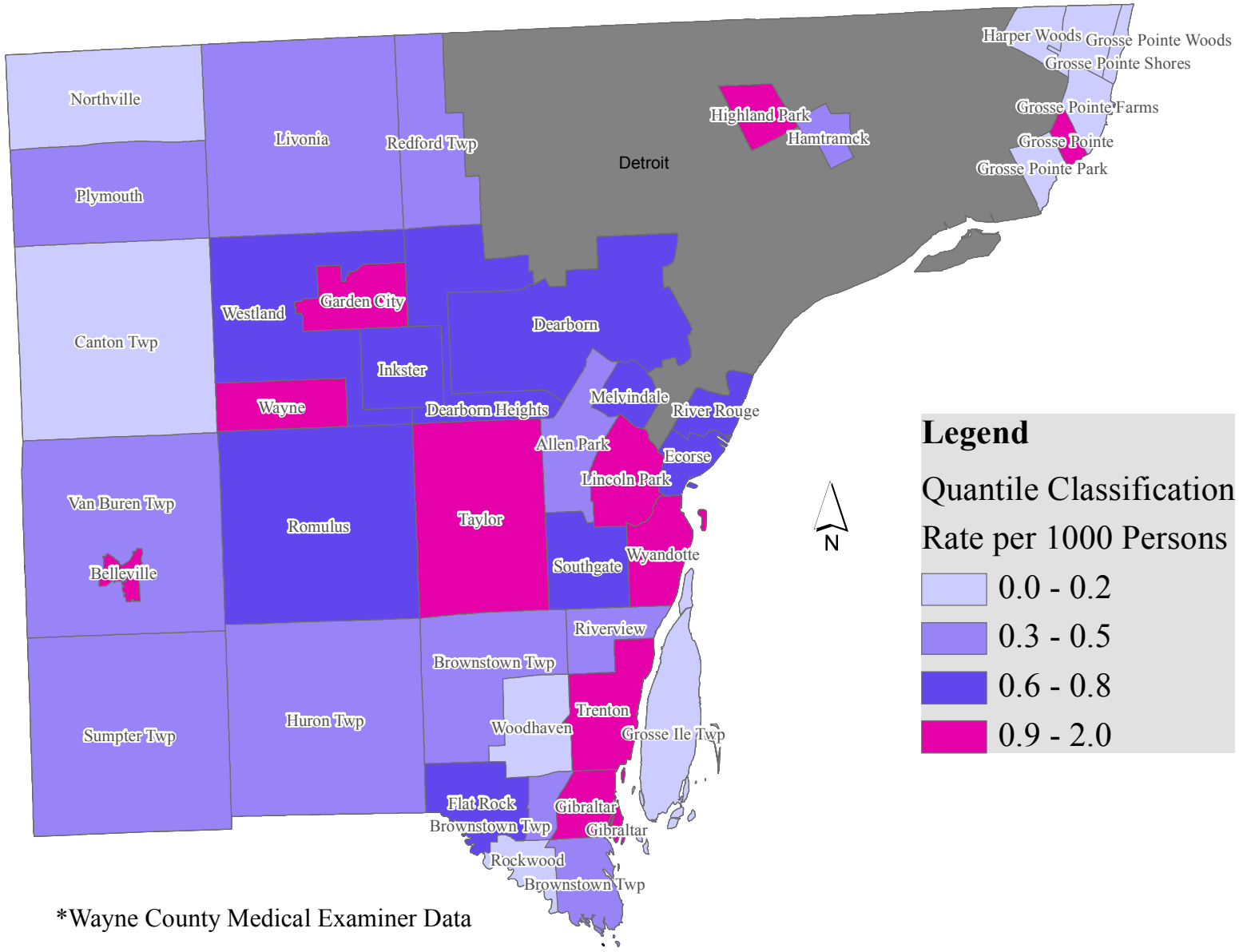
## Section 3.8 Mortality

A total of 77 drug-related documented immediate cause(s) of death were assigned to 591 cases from the Wayne County Medical Examiner's Office between 2008 and 2010. From this list, 13 codes were created. Appendix A tables A.2-A.14 provides a complete listing of how the 77 codes were collapsed into 13 categories.

Cities of particular concern in the SEMCA region, based on drug-related mortality, are Wyandotte, Wayne, Grosse Pointe and Highland Park. These four cities are rated in the top three for mortality rates (per 1000 population) across one or more substances, as detailed in the tables to come. Wyandotte has the most deaths per 1000 population related to multiple drug use and also has the highest mortality per 1000 population from heroin. Next, Wayne is second highest in mortality rates for multiple drugs and is second highest in mortality for cocaine deaths. Grosse Pointe has the highest mortality rate per 1000 population for cocaine and is also highest in mortality rates from alcohol. Last, Highland Park has the third greatest mortality rate per 1000 population related to heroin and the third highest mortality rate due to alcohol of cities in the SEMCA region. Other cities of concern are Trenton and Southgate, which were rated second and third in mortality rate(s) per 1000 population due to multiple drug use. Also, Melvindale is second highest in mortality rates per 1000 population for alcohol deaths.

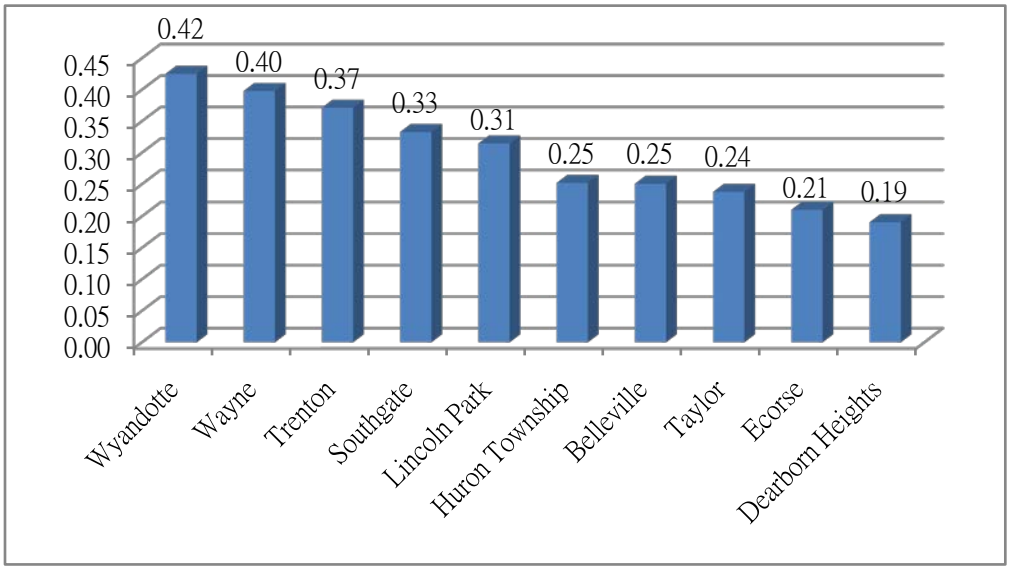
The map on the next page combines all substance-related deaths by city and population rates from the 2010 census and were classified into quartiles. The cities in the highest quartile include: Highland Park, Grosse Pointe City, Garden City, Wayne, Taylor, Lincoln Park, Belleville, Wyandotte, Trenton and Gibralter.

# Substance Related Deaths*
# Out-Wayne County Municipalities, 2008-2010



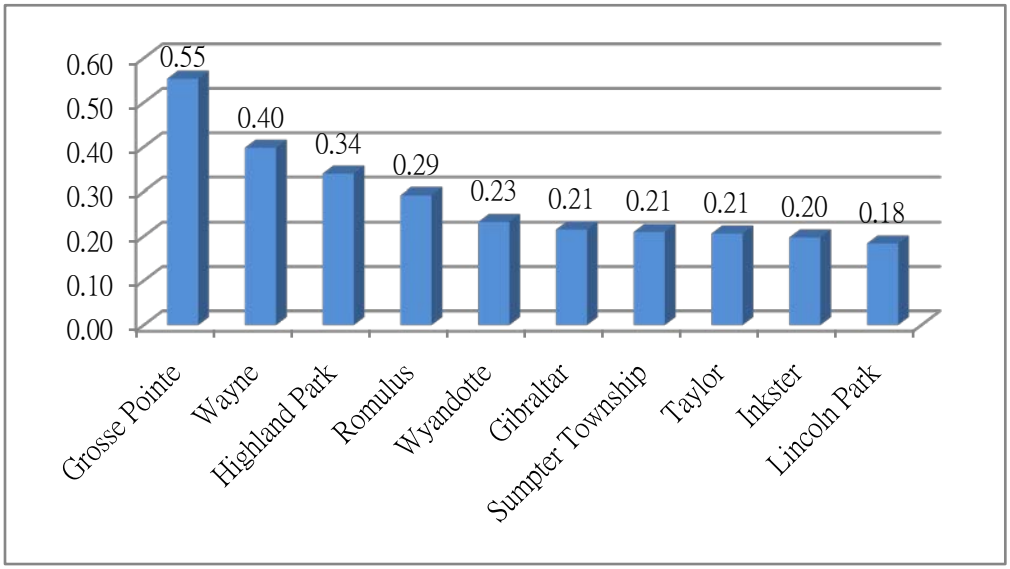

*Wayne County Medical Examiner Data

Figure 3.12 Top 10 Municipalities for Multiple Drug Related Deaths, Rate per 1,000 for years 2008-2010



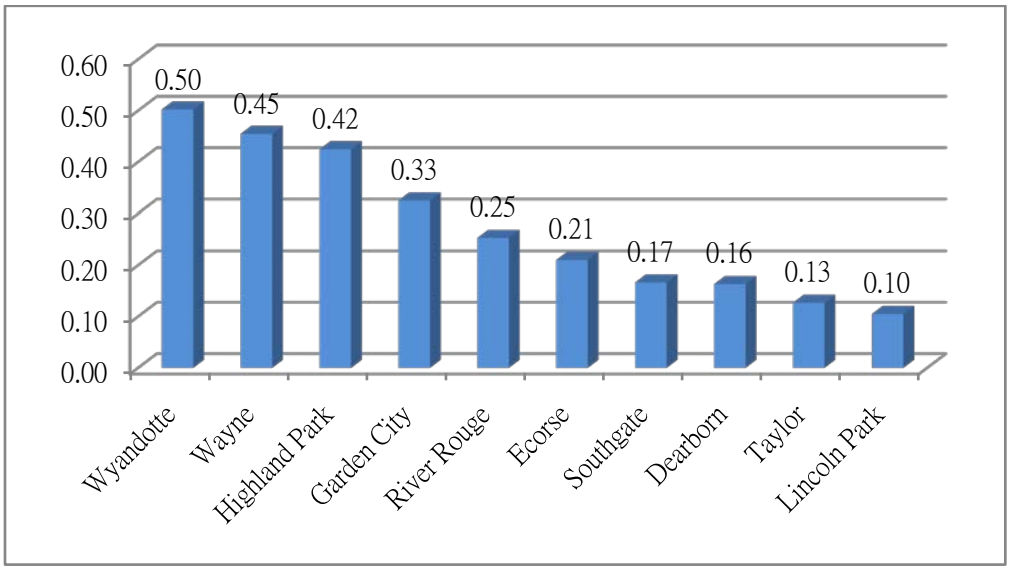

- Figure 3.12 displays the top ten municipalities for multiple-drug deaths in the SEMCA region (per 1,000 population) from 2008-2009.
- The cities of Wyandotte, Wayne and Trenton have the highest rate per 1,000 population for multiple-drug deaths in the SEMCA region, with approximately 40 deaths per 1,000 population related to the use of multiple drugs.

Figure 3.13 Top 10 Municipalities for Cocaine Related Deaths, Rate per 1,000 for years 2008-2010



- Figure 3.13 displays the top ten municipalities for cocaine-related deaths per 1,000 population in the SEMCA region from 2008-2010.
- Grosse Pointe, Wayne and Highland Park have the highest rate of death per 1,000 population related to cocaine use, with between 34 and 55 deaths per 1,000 population.
- It must also be noted that Wayne was second in deaths per 1,000 population related to multiple drug use.
- Additionally, Wyandotte was highest in deaths per 1,000 population for multiple drugs and is the city with the 5th greatest death rate per 1,000 population for cocaine use.

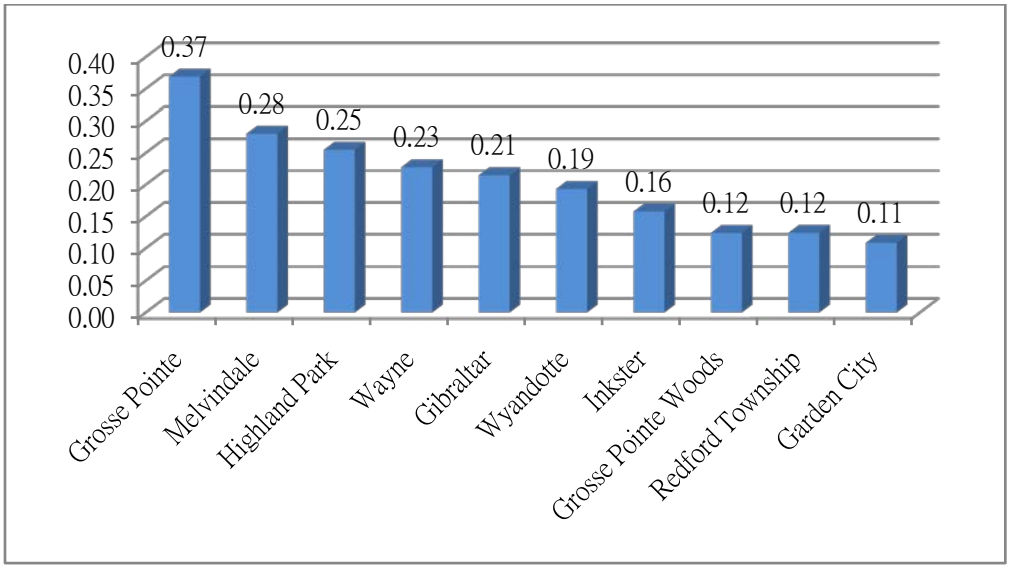
Figure 3.14 Top 10 Municipalities for Heroin Related Deaths, Rate per 1,000 for years 2008-2010




- Figure 3.14 displays the top 10 municipalities for heroin-related deaths per 1,000 population in the SEMCA region from 2008-2010.
- Wyandotte, Wayne and Highland Park are in the top three for heroin related deaths.
- Additionally, Wyandotte was 5th for cocaine related deaths per 1,000 population and 1st in drug deaths related to multiple drug use.
- The city of Wayne has been the second highest in deaths from 2008-2010 for cocaine, heroin and multiple drug use.
- Finally, Highland Park, in addition to being the 3rd highest city for heroin deaths was also the city with the 3rd highest number of deaths related to cocaine use.

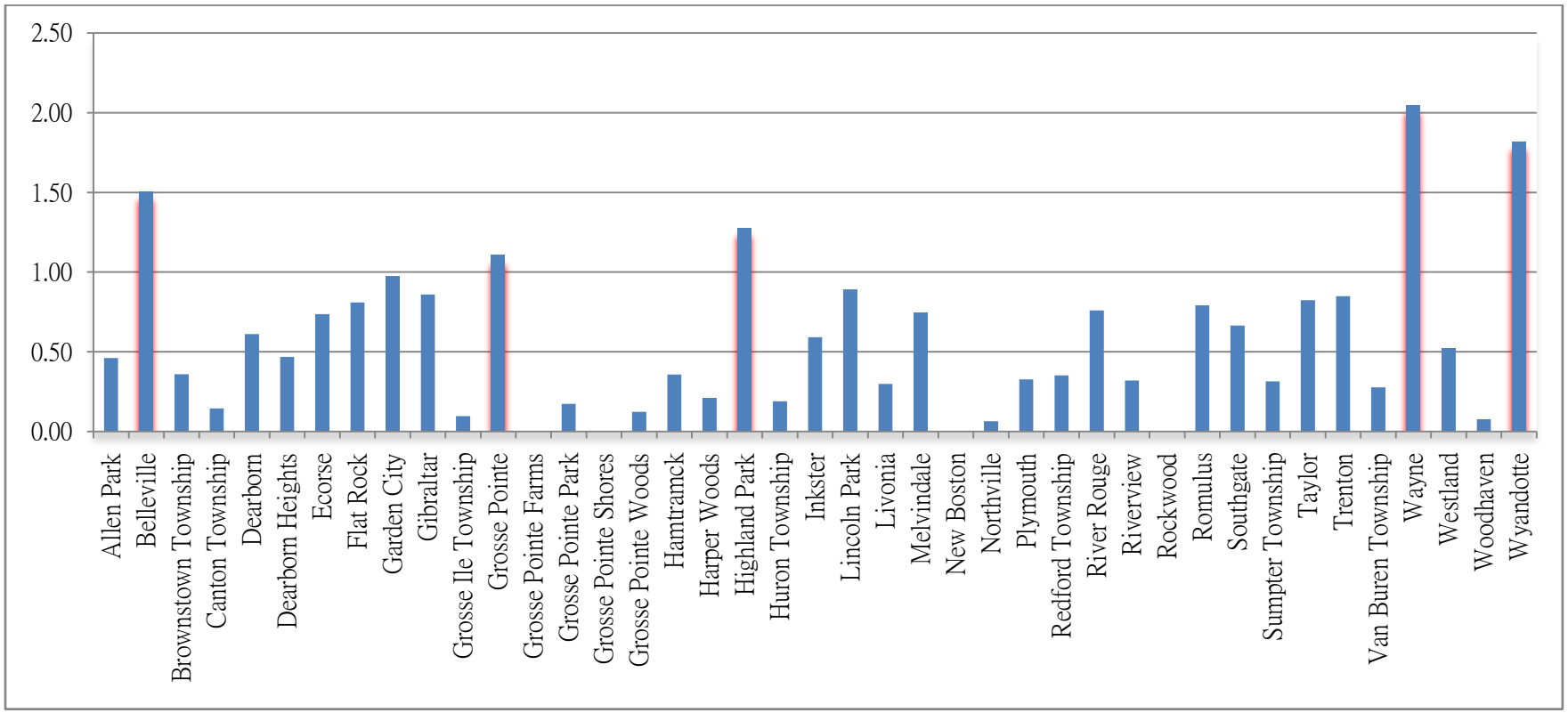
Figure 3.15

Top 10 Municipalities for Alcohol Related Deaths, Rate per 1,000 for years 2008-2010



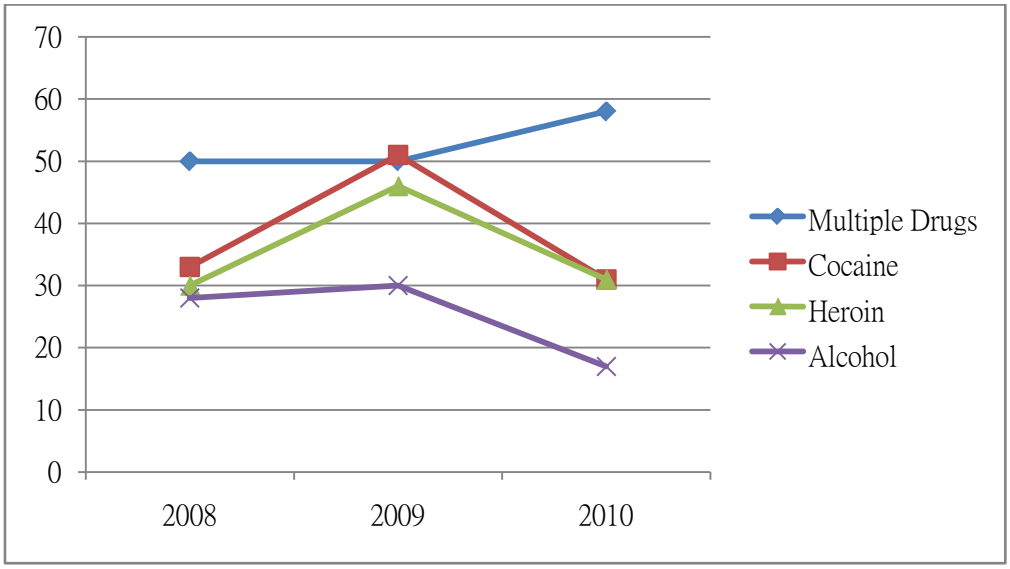

- Figure 3.15 display the top ten municipalities for alcohol related deaths per 1000 population in the SEMCA region.
- Grosse Pointe, Melvindale and Highland Park are the top three municipalities in alcohol related deaths.
- Grosse Pointe is the city with the highest alcohol and cocaine related deaths.
- Highland Park has the 3rd highest rate for alcohol deaths and is also the city with the 3rd highest death rate for cocaine and heroin use.
- The city of Wayne is 4th highest in alcohol related deaths, while Wayne is the city with the 2nd highest death rate for multiple drug use, cocaine and heroin use.
- Finally, Wyandotte is again present in this quartile for being the 6th highest city with drug deaths related to alcohol. Wyandotte also has the highest rate of deaths for multiple drugs and heroin use and is 5th highest for deaths for cocaine use.
- The tables above demonstrate that the cities of Grosse Pointe, Highland Park, Wayne and Wyandotte are of particular concern for substance-related death rates, as all of these cities fall in the top three to five for drug related deaths for the all drugs examined (multiple drugs, heroin, alcohol and cocaine).

Figure 3.16 Total Alcohol and Drug Related Deaths by City, 2008-2010 Rate per 1,000




- Three-year death trend totals are outlined above and the cities with the highest 3 year mortality rate are highlighted; all per 1,000 population.
- Wayne, Wyandotte, Belleville, Highland Park and Grosse Pointe, respectively all have 3 year mortality rates over 1.0.
- However, Belleville is interesting in that it has the third highest three-year mortality rate among all cities in the SEMCA region, yet is not identified as a city of concern related to drug connected mortality. In fact, Belleville's reports of mortality for heroin, cocaine and alcohol are 0 per 1000 population and .25 per 1000 population for multiple drug deaths. Belleville also has very high treatment admission rates (the highest in the region by a large margin) yet mortality for this city is still very high.

Figure 3.17 Substance Related Death Trends by Substance 2008-2010




- The figure above details three-year death rate averages across multiple drugs, cocaine, heroin and alcohol.
- Death trends for other drugs detailed in Figure 3.17 (Oxycodone, Methoadone, Hydrocodone, Morphine, Drugs Abuse, Opiates, Fentanyl, Prescription drugs and Intravenous) are not detailed in the chart above as rates were significantly lower, (less than 10 per year) compared to deaths from multiple drugs, heroin, cocaine and alcohol.
- The highest rates of drug deaths across all three years (2008-2010) are due to multiple drug use. Multiple drug deaths were stable from 2008 to 2009 but show a dramatic increase in 2010.
- Secondly, cocaine deaths have the second highest three-year death trend, with 2009 death rates comparable to multiple drug deaths. Cocaine deaths are similar in 2008 and 2010 and demonstrate an increase during 2009.
- Three-year trend rates for heroin deaths are slightly less than cocaine deaths and lower than multiple drug deaths. Rates of heroin deaths, similar to cocaine, were stable in 2008 and 2010 and increased during 2009.
- Compared to multiple drug, cocaine and heroin deaths, alcohol three-year death rates are lower. However, alcohol drug deaths remain higher than deaths from all other drug types, including prescription drugs and opiates.
- Alcohol deaths appear to have slightly increased from 2008 to 2009, but then dipped dramatically in 2010.

## Summary and Recommendations

The southeastern sub-state region reports rates of alcohol use that are about 2% higher than the national rates, but are similar to State of Michigan rates as a whole. Therefore, the State of Michigan and southeast sub-state region report using alcohol more frequently than the nation on average.

- State and sub-state rates for non-medical use of prescription drugs are considerably higher, (almost double) compared to national rates. This may point to the need for prevention and/or treatment programs targeting those who are using prescription drugs.
- The high rates of illegal prescription drug use may also suggest the need for strategies in the region that combat illegal prescription and painkiller drug use, such as increased diligence on the part of pharmacists and doctors to monitor and report signs of abuse or misuse.
- Out-Wayne and Monroe high schools students report rates of drug and alcohol use that is lower than YRBS comparisons, but report significantly high rates of prescription drug use.
- Out-Wayne County and Monroe high school students report use of alcohol and binge drinking that are lower than the state average for similar youth. Therefore, while it appears rates of alcohol use among adults in the state and sub-state region are slightly higher than national rates, this trend does not seem to hold true for youth.
- Out-Wayne and Monroe county middle school students report low rates of marijuana use on average. In contrast, these students report rates of prescription painkiller, methamphetamine, injection substances, inhalants, cocaine and steroid use that is considerably higher than their high school counterparts. For example, while .9% of Wayne County high school students report the use of methamphetamine in the last 30 days, 5.4% of middle school students in Wayne County report meth use. Similar variance is seen for injection, inhalants, cocaine, heroin, and prescription drugs and painkillers. This speaks to a significant need for prevention efforts directed to youth in this region and an even greater need among younger youth.
- Because of Monroe County's low response rate on the community survey, one must use caution when comparing these reports to other averages. However, it must be noted that, while Monroe County residents in the study report rates of alcohol use that are about 15% less than State and Out-Wayne county use rates, their rates of binge drinking are almost 6% higher. These results may indicate that while Monroe County residents report using alcohol less than others surveyed, those who are using alcohol may engage in more binge drinking or abuse of alcohol.
- Based on consumer treatment data it appears that, regardless of gender or race, alcohol is the top drug of choice with opiates as a close second. Perhaps prevention and treatment programs need to target these substances independently or place a greater importance on prevention of the use of these substances.
- African-American clients, however, do appear to use cocaine and cannabis as drugs of choice more often than White clients. Perhaps particular attention needs to be paid to these drugs in prevention and

treatment services for African-American clients. Also, individuals who use cannabis as their drug of choice initiated drug use much earlier than those who identify other drugs as their drug of choice.

- Almost half of all clients in treatment have mental health issues upon admission and a significant number also have physical health issues. These facts point to the necessity for greater training and competency in the treatment of co-occurring disorders and for the ability of services providers to be equipped to handle physical health issues concurrently with substance abuse issues.
- Wyandotte has the most deaths related to multiple drug use and also has the highest rate of deaths from heroin.
- Grosse Pointe has the highest mortality rate for cocaine and is also highest in rate of death from alcohol.
- Wayne is second highest in mortality for multiple drugs used and is second highest in mortality for cocaine deaths.
- Last, Highland Park, Trenton, Southgate and Melvindale rank second or third in relation to mortality rates for multiple drugs, heroin, cocaine or alcohol.
- The cities above are also the highest in overall mortality-rate trend data from 2008-2010.
- Highland Park and Hamtramck have some of the highest rates of health consequences related to substance-use disorders, suggesting particularly high needs in these areas.
- Despite very high rates of morbidity due to substance abuse in these two cities, when compared to mortality rates, Highland Park, but not Hamtramck, also has high mortality rates due to drugs and alcohol. Highland Park has the third highest mortality rate related to use of cocaine, heroin and alcohol. In contrast, even though Hamtramck has high substance abuse morbidity rates, the mortality rates for Hamtramck fall somewhere in the mid-range for cities in the SEMCA region.
- Ecorse, River Rouge and Inkster are also cities of concern across three types of substance morbidity: abuse, dependence and disorders. However medical/psychiatric diagnoses appear to be less of an issue for Inkster.
- Allen Park and Southgate only appear in the top quartile for substance dependence and do not appear in the top quartiles for abuse, disorder or medical/psychiatric morbidity rates.
- Inkster, Redford Township, Melvindale and Harper Woods are cities that appear in the top quartile for substance abuse morbidity but are not present in the top quartile for substance dependence morbidity rates.
- Wayne and Riverview appear in the top quartile for substance-related medical or psychiatric morbidity but these cities do not appear in the substance dependence, abuse or disorder top quartiles. This identifies that perhaps Wayne and Riverview are cities with needs specific to medical and psychiatric conditions and the relation of these conditions to substance-related morbidity.


# Chapter 4: Perspectives on Use, Causes, Consequences and Solutions to the Problem

## Introduction

In the last chapter the problem of substance use disorders is described in terms of its features, consequences, regional magnitude (in relation to state and national rates), and distribution across the SEMCA region. This description tells us the characteristics of those experiencing the problem and the types of substances being used. We know how many people are using and abusing substances and the serious results that occur related to use and abuse. The next step is to assess various perspectives about the problem: What do residents and other stakeholders think are the causes of the problem in the community? Do they think the problem is serious? When community perspectives are combined with data from the previous chapter on the objective conditions of the problem, we have strengthened the assessment of needs for substance abuse treatment, since no one approach is sufficient. In some cases perceptions about substance use and abuse may not match with the actual data on the problem. When this is the case, actions may be needed to correct misperceptions or, conversely, to build positive messages that speak to the strengths of the system to respond or give individuals motivation to seek treatment.

The acceptability of a solution is also an important consideration for understanding the problem of substance use disorders. Community residents hold various attitudes about substance abusers, treatment and recovery. These attitudes are surrounded in beliefs about the morality of people who abuse substances and the role of willpower as a necessary step in getting help. We have to understand how the stakeholders of the SEMCA region perceive this problem and their knowledge and beliefs about getting help and support. Even when treatment options are in place, stigma, lax attitudes, and misperceptions create barriers for obtaining help. If we know what people think are the best ways to address the problem, then solutions can be assessed for their fit with the community, thereby maximizing the potential for adoptability and effectiveness.

This chapter presents data from multiple sources, which is organized by perspectives about the problem, causes, and risks related to various levels of substance use. Next, we present information on what stakeholders think are the major consequences related to use, and their views about what can be done to encourage people to get treatment and support recovery.

## Section 4.1 Perceptions and Attitudes about Substance Use and Abuse

As shown in Chapter 3, NSDUH data indicate that the rate of substance use in the SEMCA region is very similar to the rates reported for the state of Michigan (except for binge drinking, which is lower). When residents (n=563) were asked about substance abuse problems in their county, 40% thought that the

problem was bigger than other counties in Michigan, 40% thought that it was the same, 13% thought the problem was less than other counties and 6% did not know.

Studies show that youth perceptions of use are often higher than reported rates of substance use by youth. In tables 4.1 through 4.4, youth perceptions of their closest friends' use are reported.

Table 4.1 Out-Wayne County High School Youth Perceptions of Use (n=9798)

| In the past 30 days, how many of your closest friends do you think…? | Have Smoked Cigarettes | | Have Been Drunk | | Did Marijuana | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| None | 3,800 | 39.0 | 3,269 | 33.5 | 3,827 | 39.4 |
| Some | 3,884 | 38.8 | 4,059 | 41.7 | 3,296 | 33.9 |
| All/most | 2,071 | 21.2 | 2,416 | 24.8 | 2,600 | 26.7 |
| **Total** | **9,755** | **100.0** | **9,744** | **100.0** | **9,723** | **100.0** |

- Approximately one-fifth to one-quarter of Out-Wayne-County youth believe that all or most of their friends had smoked cigarettes (21%), were drunk (25%) or did marijuana (27%) in the last 30 days.

Table 4.2 Monroe County High School Youth Perceptions of Use (n=1689)

| In the past 30 days, how many of your closest friends do you think…? | Have Smoked Cigarettes | | Have Been Drunk | | Did Marijuana | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| None | 631 | 37.6 | 519 | 31.0 | 682 | 40.8 |
| Some | 699 | 41.8 | 722 | 43.1 | 590 | 35.4 |
| All/most | 346 | 20.6 | 434 | 25.9 | 398 | 23.8 |
| **Total** | **1,676** | **100.0** | **1,675** | **100.0** | **1,670** | **100.0** |

- One-fifth of Monroe County high school youth believe that all or most of their friends had smoked cigarettes (21%), were drunk (26%), or did marijuana (24%) in the last 30 days.

Table 4.3 Out-Wayne County Middle School Youth Perceptions of Use (n=5201)

| In the past 30 days, how many of your closest friends do you think…? | Have Smoked Cigarettes | | Have Been Drunk | | Did Marijuana | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| None | 3,485 | 67.3 | 3,653 | 70.8 | 3,950 | 76.6 |
| Some | 1,336 | 25.8 | 1,122 | 21.7 | 848 | 16.5 |
| All/most | 356 | 6.9 | 387 | 7.5 | 356 | 6.9 |

| In the past 30 days, how many of your closest friends do you think…? | Have Smoked Cigarettes | | Have Been Drunk | | Did Marijuana | |
|---|---|---|---|---|---|---|
| Total | 5,177 | 100.0 | 5,162 | 100.0 | 5,154 | 100.0 |

- The majority of middle school youth believe that none of their closest friends had smoked cigarettes (67%), had been drunk (71%), or did marijuana (77%) in the last 30 days.

Table 4.4 Monroe County Middle School Youth Perceptions of Use (n=1426)

| In the past 30 days, how many of your closest friends do you think…? | Have Smoked Cigarettes | | Have Been Drunk | | Did Marijuana | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| None | 1,026 | 72.2 | 1,089 | 76.7 | 1,142 | 80.7 |
| Some | 331 | 23.3 | 266 | 18.7 | 213 | 15.0 |
| All/most | 65 | 4.5 | 66 | 4.6 | 61 | 4.3 |
| Total | 1,422 | 100.0 | 1,421 | 100.0 | 1,416 | 100.0 |

- The majority of middle school youth in Monroe County believe that none of their closest friends had smoked cigarettes (72%), were drunk (77%), or did marijuana (81%) in the last 30 days.

Community residents were asked to indicate how serious alcohol and other drug problems were in their community. As table 4.5 shows, illicit drug abuse (e.g., marijuana, cocaine, and heroin) was perceived as the most serious (52%), alcohol abuse was the second most serious (46%) and prescription drug abuse was the third most serious (45%) problem.

Table 4.5 Perceptions on Seriousness of Substance Abuse Problems (n=563)

| | |
|---|---|
| How serious of a problem is alcohol abuse in YOUR COMMUNITY? | |
| Serious | 259 (46.2%) |
| Not Serious | 259 (46.2%) |
| Don't Know | 43 (7.7%) |
| How serious of a problem is illicit drug abuse in YOUR COMMUNITY? | |
| Serious | 290 (51.8%) |
| Not Serious | 224 (40.0%) |
| Don't Know | 46 (8.2%) |
| How serious of a problem is prescription-drug abuse in YOUR COMMUNITY? | |
| Serious | 251 (44.8%) |
| Not Serious | 232 (41.4%) |
| Don't Know | 77 (13.8%) |

| | |
|---|---|
| **How serious of a problem is abuse of over-the-counter drugs in YOUR COMMUNITY?** | |
| Serious | 156 (28.0%) |
| Not Serious | 316 (56.6%) |
| Don't Know | 86 (15.4%) |

## Perception of Marijuana Use

Community residents were asked about their attitudes toward marijuana use. As you can see in the table below, two-thirds of the residents do not support the legalization of marijuana. However, three-fourth of residents supports medical marijuana if a physician recommends it.

Table 4.6 Residents Perceptions on Marijuana Use (n=563)

| | |
|---|---|
| **All marijuana use should be legalized.** | |
| Agree | 176 (32.1%) |
| Disagree | 363 (66.1%) |
| Don't Know | 14 (2.5%) |
| **Adults should be allowed to legally use marijuana for medical purposes if a physician recommends it.** | |
| Agree | 418 (75.6%) |
| Disagree | 132 (23.9%) |
| Don't Know | 3 (0.5%) |

## Attitudes about Youth Use and Abuse

Three groups of stakeholders were asked about the community's attitudes toward youth using and misusing alcohol and drugs. The most frequent community attitude noted by the majority of parents, youth and key informants was that substance use by youth is acceptable. This attitude was framed around four common issues. The community believes that until youth get in serious trouble, that substance use is okay. One key informant said "I think when they hear about it in the paper they are alarmed and concerned, but in their day-to-day lives it doesn't mean anything to them because everyone always thinks it's someone else." There is the perception that it's only the "bad kids" that are doing drugs. One parent said "…they don't realize that the cheerleader taking Adderall for a test..." is using. The community also sees youth experimentation as a normal part of growing up. Experimenting with alcohol is part of most people's shared history. Many reported that parents and other adults enable youth use by providing alcohol. As one key informant noted "…you have a good portion of parents who think it's okay, as long as the kids are responsible. I'll take their keys; they'll stay in my house, its fine." Several of the respondents were clear about the double standard between alcohol use and illicit drug use. Using alcohol is more acceptable

than marijuana use. People are fearful that smoking marijuana is a gateway drug that leads to other drug use.

The second most frequent response was that substance use by youth was unacceptable and dangerous. The responses showed that "the community's attitude is that you should abstain from the use of drugs period: alcohol, tobacco, other drugs, marijuana, everything." There were several mentions of intolerance of youth and adult substance use from the Arab-American community in the SEMCA region. The religious ban helps to reinforce the positive message to "avoid whatever hurts you."

### Attitudes about Adult Use and Abuse

In an open-ended question, stakeholders were asked about the community's attitudes about adult substance use and abuse in the SEMCA region. The qualitative data was coded for themes, which are presented in the table below (see Appendix A for description of the data-analysis strategy). Almost one-quarter of the responses indicated that people perceive adult use of substances as normal, expected behavior and, when this is combined with beliefs regarding the acceptance because of the legality of the substance, a third of responses indicate an attitude of acceptance. Negative attitudes are also prevalent (approximately 31%) and include stereotypes around drug abusers, if there are consequences related to use, and viewed as something to keep private.

Table 4.7 Frequency of Attitudes Related to Adult Use and Abuse (n=105)

| | |
|---|---|
| Normal behavior (socially acceptable, experimentation expected) | 23.8% (n=25) |
| Negative stereotypes (negative view of users or people in recovery, stigmatizing, judgmental) | 17% (n=18) |
| Tolerant of legal substance use (drinking alcohol, use of prescription drugs) | 11.4% (n=12) |
| Abstinence/Not tolerant of any use | 10.5% (n=11) |
| Something to keep private (embarrassed, keep from being labeled) | 7.6% (n=8) |
| Against the law | 6.6% (n=7) |
| Negative if consequences (DUI, neglect) | 6.6% (n=7) |
| Ignorance (not aware of differences in drugs, lack of knowledge) | 5.7% (n=6) |
| Use/abuse not a problem (benign) | 4.7% (n=5) |
| Ambivalence | 2.8% (n=3) |
| Against religion/culture | 2.8% (n=3) |

Executive directors as well as treatment and prevention staff of SEMCA-funded programs were asked what attitude best reflects their community's attitude toward substance abuse. Table 4.8 shows that providers have different perspectives on the community's attitudes. Two-fifths to half of the providers believe that the community is accepting of some substance use. Treatment staff perceive greater zero tolerance in the community than other professional groups. Prevention staff are more likely to perceive greater denial that

there is a substance abuse problem in the community. Overall, they perceive the SEMCA region as accepting of substance use.

Table 4.8 SEMCA Providers' Views on Community Attitudes toward Substance Abuse

| | Executive Directors | Treatment Staff | Prevention Staff |
|---|---|---|---|
| Zero tolerance | 10% (n=2) | 23% (n=24) | 6% (n=2) |
| Accepting of some substance use | 42% (n=9) | 42% (n=45) | 52% (n=18) |
| Accepting of substance use on a regular basis | 38% (n=8) | 25% (n=26) | 21% (n=7) |
| In denial that there is a substance use problem | 10% (n=2) | 10% (n=11) | 21% (n=7) |

## Section 4.2 Perceived Risks Related to Use

Research demonstrates that perceptions of higher risk are correlated with lower substance use rates. Thus, perceptions of risk related to substance use are often the target for prevention messages among youth. However, it seemed appropriate to understand how adult residents view risk in relation to the frequency of use, including occasional and regular use. As can be seen in table 4.9, the highest risk is associated with occasional or regular use of heroin (97% and 98% respectively), cocaine (95% and 98%) and prescription drugs for non-treatment use (80% and 96%). Regular use of alcohol (89%) is also perceived as high risk. As expected, occasional use of cigarettes, marijuana and alcohol are perceived as less risky (30%, 36% and 56% respectively).

Table 4.9 Residents' Perceived Risks Associated with Occasional and Regular Alcohol and Drug Use (n=563)

| | Occasional Use | Regular Use |
|---|---|---|
| **How much do people risk harming themselves or others when they smoke CIGARETTES?** | | |
| No/low risk | 165 (29.9%) | 36 (6.5%) |
| High risk | 384 (69.6%) | 514 (92.9%) |
| Don't Know | 3 (0.5%) | 3 (0.5%) |
| **How much do people risk harming themselves or others when they smoke MARIJUANA?** | | |
| No/low risk | 197 (35.6%) | 56 (10.1%) |
| High risk | 34 (62.1%) | 483 (87.2%) |
| Don't Know | 13 (2.3%) | 15 (2.7%) |
| **How much do people risk harming themselves or others when they drink ALCOHOL?** | | |
| No/low risk | 309 (56.0%) | 56 (10.1%) |
| High risk | 240 (43.5%) | 493 (89.3%) |
| Don't Know | 3 (0.5%) | 3 (0.5%) |

| | Occasional Use | Regular Use |
|---|---|---|
| **How much do people risk harming themselves or others when they use COCAINE?** | | |
| No/low risk | 16 (2.9%) | 2 (0.4%) |
| High risk | 525 (95.1%) | 540 (97.8%) |
| Don't Know | 11 (2.0%) | 10 (1.8%) |
| **How much do people risk harming themselves or others when they use HEROIN?** | | |
| No/low risk | 7 (1.3%) | 2 (0.4%) |
| High risk | 536 (97.1%) | 538 (97.6%) |
| Don't Know | 9 (1.6%) | 11 (2.0%) |
| **How much do people risk harming themselves or others when they use prescription drugs for non-treatment use?** | | |
| No/low risk | 106 (19.2%) | 19 (3.4%) |
| High risk | 440 (79.9%) | 354 (95.5%) |
| Don't Know | 5 (0.9%) | 6 (1.1%) |
| **How much do people risk harming themselves when they abuse over the counter drugs?** | | |
| No/low risk | 61 (11.1%) | |
| High risk | 483(87.8%) | |
| Don't Know | 6 (1.1%) | |

Youth in the SEMCA region hold similar beliefs about the harm that may be caused by using substances. Tables 4.10 through 4.13 provide data on youth perspectives related to risk. The questions are similar to those in the tables above except that the questions do not distinguish between occasional or regular use.

Table 4.10 Out-Wayne County High School Youth Perceptions of Risk (n=9798)

| How much do you think people risk harming themselves (physically or in other ways) if they…? | Smoke a Pack a Day | | Binge Drink | | Smoke Marijuana Regularly | | Methamphetamines Once or Twice | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % |
| No/Slight Risk | 1,486 | 15.2 | 2,560 | 26.2 | 3,081 | 31.5 | 1,492 | 15.3 |
| Moderate/Great Risk | 8,015 | 81.8 | 6,929 | 70.9 | 6,242 | 64.0 | 6,171 | 63.3 |
| Don't Know | 297 | 3.0 | 288 | 2.9 | 436 | 4.5 | 2,092 | 21.4 |
| **Total** | **9,798** | **100.0** | **9,777** | **100.0** | **9,759** | **100.0** | **9,755** | **100.0** |

- Youth in Out-Wayne County associate the greatest risk with smoking a pack of cigarettes a day (82%), compared to 64% for smoking marijuana regularly.
- Over one-fifth (21%) of youth did not know the risks associated with methamphetamines.

Table 4.11 Monroe County High School Youth Perceptions of Risk (n=1689)

| How much do you think people risk harming themselves (physically or in other ways) if they…? | Smoke a Pack a Day | | Binge Drink | | Smoke Marijuana Regularly | | Methamphetamines Once or Twice | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % |
| No/Slight Risk | 210 | 12.4 | 471 | 28.0 | 515 | 30.6 | 213 | 12.7 |
| Moderate/Great Risk | 1,430 | 84.7 | 1,167 | 69.3 | 1,091 | 64.8 | 1,099 | 65.5 |
| Don't Know | 49 | 2.9 | 45 | 2.7 | 78 | 4.6 | 365 | 21.8 |
| **Total** | **1,689** | **100.0** | **1,683** | **100.0** | **1,684** | **100.0** | **1,677** | **100.0** |

- Youth in Monroe County associate the greatest risk with smoking a pack of cigarettes (85%), over binge drinking (69%), regular marijuana use (65%), and using methamphetamines once or twice (65%).
- Over one-fifth (22%) of youth did not know the risks associated with methamphetamines.

Table 4.12 Out-Wayne County Middle School Youth Perceptions of Risk (n=5201)

| How much do you think people risk harming themselves (physically or in other ways) if they…? | Smoke a Pack a Day | | Binge Drink | | Smoke Marijuana Regularly | | Methamphetamines Once or Twice | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % |
| No/Slight Risk | 834 | 16.0 | 1,286 | 24.8 | 956 | 18.4 | 805 | 15.6 |
| Moderate/Great Risk | 4,155 | 79.9 | 3,692 | 71.1 | 3,817 | 73.5 | 2,799 | 54.2 |
| Don't Know | 212 | 4.1 | 215 | 4.1 | 421 | 8.1 | 1,563 | 30.2 |
| **Total** | **5,201** | **100.0** | **5,193** | **100.0** | **5,194** | **100.0** | **5,167** | **100.0** |

- Youth believe that there is moderate/great risk when smoking cigarettes (80%), binge drinking (71%), and smoking marijuana regularly (74%).
- Almost one-third of middle school youth in Out-Wayne County do not know the risks of methamphetamines.

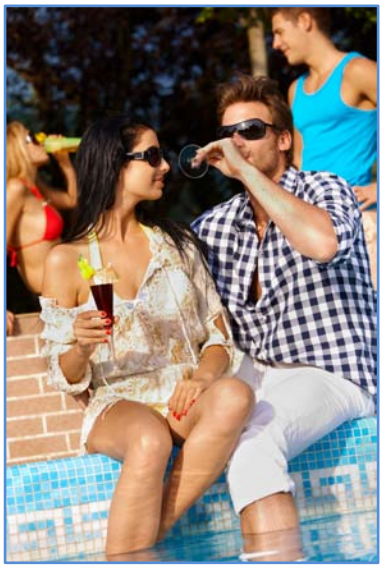
Table 4.13 Monroe County Middle School Youth Perceptions of Risk (n=1426)

| How much do you think people risk harming themselves (physically or in other ways) if they…? | Smoke a Pack a Day | | Binge Drink | | Smoke Marijuana Regularly | | Methamphetamines Once or Twice | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % |
| No/Slight Risk | 174 | 12.2 | 418 | 29.3 | 211 | 14.8 | 146 | 10.3 |
| Moderate/Great Risk | 1,204 | 84.4 | 955 | 67.0 | 1,108 | 77.8 | 768 | 54.3 |
| Don't Know | 48 | 3.4 | 53 | 3.7 | 105 | 7.4 | 500 | 35.4 |

| How much do you think people risk harming themselves (physically or in other ways) if they…? | Smoke a Pack a Day | | Binge Drink | | Smoke Marijuana Regularly | | Methamphetamines Once or Twice | |
|---|---|---|---|---|---|---|---|---|
| Total | 1,426 | 100.0 | 1,426 | 100.0 | 1,424 | 100.0 | 1,414 | 100.0 |

- The majority of youth believe that there is a moderate/great risk when smoking cigarettes (84%), binge drinking (67%), and smoking marijuana (78%).
- Over one-third (35%) of middle school youth do not know if methamphetamines are a risk.

## Section 4.3 Perceived Causes of the Problem



SEMCA consumers, key informants and providers were asked about their views on the causes of substance abuse. The open-ended questions yielded 557 mentions that reflected over 20 different responses. One-quarter of the answers covered a range of explanations for substance abuse that were coded as other causes such as genetics or biological factors, lack of parental monitoring, over-prescribing practices, and medical reasons/pain management). Table 4.14 shows that the next most frequent response from stakeholders is that individuals abuse substances for psychological reasons to help them cope, deal with stress, trauma or because of mental health issues like depression. Respondents said "People use drugs because they do not like something about themselves" or people use to "find a way to get rid of the pain." Coping was one of the most common refrains to this question. A provider said "Adults use substances as a mechanism of coping with other issues and challenges that they are facing in their lives." More treatment and prevention providers think this, compared to other groups; they also have stronger views about economic factors playing a role in the causes of substance abuse. Consumers were more likely to ascribe the causes to social norms and the social environment. One adult consumer described it as "Friends that's not really friends. You got people that just, 'Hey, come try this." You know, easy, and they'll give it to you before you pay for it." Economic factors were also cited 10% of the time such as "Michigan economics" and "lack of work." Respondents reported the role of family norms as a reason why people abuse substances. As one consumer noted "It starts with family. Children growing up seeing their parents using." Availability and ease of access was also mentioned. One consumer noted "There is a lot of drugs where I live."

Table 4.14 Top Five Mentions on the Causes of Substance Abuse

| Cause | Consumers (n=144) | Key Informants (n=166) | Providers (n=247) | Total (n=557) |
|---|---|---|---|---|
| Psychological Factors (coping, stress, trauma, depression) | (39) 27% | (50) 30% | (84) 34% | (173) 31% |
| Social Norms & Environment (favorable attitudes, to fit in, peer pressure, acceptable) | (33) 23% | (32) 19% | (40) 16% | (105) 19% |
| Economic Factors (poverty, lack of employment, financial) | (8) 6% | (16) 10% | (40) 16% | (64) 11% |
| Family Norms (parents use, parents acceptance, values) | (14) 10% | (15) 9% | (7) 2% | (36) 6% |
| Easy Access/ Availability | (11) 8% | (5) 3% | (13) 5% | (29) 3% |
| Other Causes | (39) 27% | (43) 26% | (63) 26% | (150) (27%) |

## Section 4.4 Perceived Availability

Research demonstrates that the availability of substances in a community is related to consumption. Substance abuse experts suggest that ease of access and the number alcohol retail outlets increases consumption, which is then related to the rates of problems in a community. Table 4.15 shows the responses of residents who were asked how easy/difficult it was to get various substances.

Table 4.15 Resident Perceptions of Access to Marijuana, Cocaine/Heroin, and Prescription Pain Medications (n=563)

| | |
|---|---|
| **How difficult would it be for you to get marijuana?** | |
| Difficult | 220 (40.1%) |
| Easy | 313 (57.0%) |
| Don't Know | 16 (2.9%) |
| **Where would you most likely get marijuana?** | |
| Friends | 131 (38.4%) |
| Coworker | 20 (5.9%) |
| Family | 22 (6.5%) |
| Stranger on the Street | 43 (12.6%) |
| Drug Dealer | 38 (11.1%) |
| Medical Professional | 22 (6.5%) |
| Other | 56 (16.4%) |
| Don't Know | 9 (2.6%) |
| **How difficult would it be for you to get cocaine, crack or heroin?** | |
| Difficult | 376 (68.9%) |
| Easy | 146 (26.7%) |
| Don't Know | 24 (4.4%) |

| | |
|---|---|
| **Where would you most likely get cocaine, crack or heroin?** | |
| Friends | 36 (21.2%) |
| Coworker | 7 (3.9%) |
| Family | 10 (5.6%) |
| Stranger on the Street | 37 (20.7%) |
| Drug Dealer | 45 (25.1%) |
| Other | 38 (21.2%) |
| Don't Know | 4 (2.2%) |
| **How difficult would it be for you to get prescription pain medication?** | |
| Difficult | 205 (37.5%) |
| Easy | 334 (61.1%) |
| Don't Know | 8 (1.5%) |
| **Where would you most likely get prescription pain medication?** | |
| Friends | 131 (21.3%) |
| Coworker | 9 (2.6%) |
| Family | 42 (11.9%) |
| Stranger on the Street | 14 (4.0%) |
| Drug Dealer | 12 (3.4%) |
| Medical Professional | 155(44.0%) |
| Other | 41(11.6%) |
| Don't Know | 4 (1.1%) |

- Over half of the residents (57%) indicate that it would be easy for them to get marijuana; 38% noted that they would get it from friends.
- A little over one-quarter (27%) indicated that it would be easy for them to get cocaine, crack or heroin, with one-quarter (25%) saying they would obtain it from a drug dealer, 21% saying from friends, and 21% saying from strangers on the street.
- Almost two-thirds (61%) said that it would be easy to get prescription pain medication; 44% cited medical professionals as the main source and 21% said friends.

High school and middle school youth reported similar access to legal substances. High school students reported easier access to all substances than middle school youth.

Table 4.16 Out-Wayne High School Youth Perceptions of Access

| If you wanted to, how easy would it be for you to get…? | Cigarettes | | Alcohol | | Marijuana | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| Hard | 3,256 | 33.6 | 3,241 | 33.6 | 4,015 | 41.7 |
| Easy | 6,424 | 66.4 | 6,419 | 66.4 | 5,619 | 58.3 |
| **Total** | **9,680** | **100.0** | **9,660** | **100.0** | **9,634** | **100.0** |

- The majority of youth report that it is easy to obtain cigarettes (66%), alcohol (66%) or marijuana (58%).

Table 4.17 Out-Wayne Middle School Youth Perceptions of Access

| If you wanted to, how easy would it be for you to get…? | Cigarettes | | Alcohol | | Marijuana | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| Hard | 3,197 | 62.7 | 3,025 | 59.5 | 4,145 | 82.0 |
| Easy | 1,901 | 37.3 | 2,057 | 40.5 | 908 | 18.0 |
| **Total** | **5,098** | **100.0** | **5,082** | **100.0** | **5,053** | **100.0** |

- The majority of middle school youth in Out-Wayne County report that it is hard to get cigarettes (63%), alcohol (60%) or marijuana (82%).

Table 4.18 Monroe County High School Youth Perceptions of Access

| If you wanted to, how easy would it be for you to get…? | Cigarettes | | Alcohol | | Marijuana | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| Hard | 543 | 32.4 | 495 | 29.6 | 727 | 43.5 |
| Easy | 1,135 | 67.6 | 1,180 | 70.4 | 944 | 56.5 |
| **Total** | **1,678** | **100.0** | **1,675** | **100.0** | **1,671** | **100.0** |

- The majority of students report that it is easy to obtain cigarettes (68%), alcohol (70%) or marijuana (56%).

Table 4.19 Monroe County Middle School Youth Perceptions of Access

| If you wanted to, how easy would it be for you to get…? | Cigarettes | | Alcohol | | Marijuana | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| Hard | 945 | 67.1 | 870 | 61.9 | 1,212 | 86.6 |
| Easy | 464 | 32.9 | 536 | 38.1 | 187 | 13.4 |
| **Total** | **1,409** | **100.0** | **1,406** | **100.0** | **1,399** | **100.0** |

- The majority of middle school students in Monroe County report that it is hard to get cigarettes (67%), alcohol (62%) or marijuana (87%).

## Section 4.5 Perceived Consequences

Stakeholders were asked about their perceptions related to the consequences of substance use and abuse in the SEMCA region. Table 4.20 displays the frequency of responses. Almost one-third (30%) of responses identify the major consequence as crime and legal issues. The second most common consequence included

physical health and mortality. The remaining half of the responses were spread across consequences related to family, employment, psychological issues, financial problems and education.

Table 4.20 Perceptions of Major Consequences related to Substance Abuse (n=505)

| | |
|---|---|
| Crime (interpersonal violence, gang activity) and legal issues (jail, prison, court) | 30% (n=126) |
| Physical health and death (medical, addiction, auto crashes) | 17% (n=87) |
| Breakdown of family and relationships | 11% (n=56) |
| Unemployment, low employment, loss of productivity | 10% (n=49) |
| Psychological issues (depression, isolation, lack of motivation) | 9% (n=47) |
| Financial problems (impact income, fines, fees) | 8% (n=38) |
| Education (suspensions, poor grades) | 7% (n=37) |
| Societal impacts (increased service utilization, welfare, homelessness) | 7% (n=35) |
| Abuse/neglect of children (removed from home) | 3% (n=17) |
| Community norms (use acceptable, violence accepted, modeling) | 2% (n=13) |

## Section 4.6 Perceived Solutions

Stakeholders were asked for suggestions on how to raise awareness in their community about issues related to substance abuse. Out of the 56 responses, one quarter (24%) pointed to education targeting the whole community through PSA's, media, and town hall meetings. Another 16% suggested education that target youth specifically, largely in schools. The next highest response (12.5%) identified more communication between professionals and families, more truth about consequences and hope for recovery. The remaining responses were recommendations for general and specific education of professional groups (physicians, clergy) and parents.

SEMCA residents support abstinence; over three-fourths believe that total abstinence is the only effective means for overcoming drug problems. The same proportion of residents believe that having a variety of treatment options is more effective than making alcohol or drug abuse a crime. A little over half (54%) of residents agree that, if an addicted person has enough willpower, he or she can stop abusing alcohol or other drugs. This may imply that residents understand that support and other options may be necessary to assist individuals with substance use disorders.

Accessing services requires that individuals know where to seek assistance. A majority of residents from the community survey (62%) indicated that they knew where to get help from the community for a family member who might need assistance. Most (57%) were able identify a specific place where someone could get help. The most commonly identified places included:

- Hospitals, physicians or insurance company (24.9%)
- Social Service Agencies (including alcohol and drug treatment providers) and other mental health professionals (10.1%)
- Churches/Places of Worship (6.0%)

- 12-Step Programs (5.5%)
- Internet/Phone Book (3.9%)

Participants who were able to identify a specific place where someone could get help were significantly more likely to be married, have a history of smoking (lifetime), and have lower levels of education (i.e. high school diploma or less).

Residents were asked what they think about treatment availability and effectiveness. As can be seen in the table below, about half felt that the community is well-prepared and doing everything it can to address the problem. They have a high degree of regard for the effectiveness of treatment and prevention. However approximately two of every five people think that there are not enough programs in their community.

Table 4.21 Community Perceptions Related to Getting Help

| | |
|---|---|
| **My community is well prepared to deal with alcohol and other drug use.** | |
| Agree | 287 (52.8%) |
| Disagree | 190 (34.9%) |
| Don't Know | 67 (12.3%) |
| **My community is doing everything it can to address alcohol and other drug problems.** | |
| Agree | 276 (50.3%) |
| Disagree | 208 (37.9%) |
| Don't Know | 65 (11.8%) |
| **Prevention programs are effective in reducing alcohol and other drug problems.** | |
| Agree | 431 (78.8%) |
| Disagree | 98 (17.9%) |
| Don't Know | 18 (3.3%) |
| **Treatment programs are effective in addressing alcohol and other drug problems.** | |
| Agree | 448 (81.8%) |
| Disagree | 74 (13.5%) |
| Don't Know | 26 (4.7%) |
| **There are enough treatment programs in my community to help people who are experiencing problems with alcohol and other drugs.** | |
| Agree | 240 (43.9%) |
| Disagree | 210 (38.4%) |
| Don't Know | 97 (17.2%) |
| **There are enough programs in my community to help to PREVENT problems with alcohol and other drugs.** | |
| Agree | 221 (40.3%) |
| Disagree | 247 (45.1%) |
| Don't Know | 80 (14.6%) |

## Summary and Recommendations

Many people see causes of substance use as social and psychological issues that, whether they understand them or not, are issues that can be addressed at a community level with a commitment to provide adequate support and education. This contradicts the perception that abstinence and willpower are necessary to end substance use behaviors. The inability to align causes, consequences and solutions hampers policy level solutions, as well as the ability to engage residents in school-based and environmental strategies for prevention and treatment. As all stakeholders have relatively similar views on causes, information to reinforce substance use disorders as treatable mental-health issues with verifiable medical/chemical changes in brain chemistry, can broadly influence perspectives of clients, providers and community alike.

Whatever the beliefs surrounding causes are, public education and awareness about the community-level costs of substance use is key. Most see the costs related to crime and health. Because stakeholders in this assessment support community-wide education, these findings can be used to develop tailored messages that will largely fit within their framework of understanding this problem. In addition, SEMCA may consider partnering with its broad network to connect with municipal leaders, businesses, educational professionals and residents to point out the societal costs associated with use and a lack of treatment, in terms of productivity lost, school failure and similar negative outcomes. These results may reflect the feeling among some community members that, while some have family or close friends with problems, many people see substance abuse as someone else's problem.

The results on perceptions and attitudes about the problem offer several areas that could be addressed in media or other marketing tactics. The acceptance of substance use is a clear target for adults and youth. Despite prevention efforts, there is still a very traditional attitude toward youth use that indicates a permissive norm. Furthermore, when we combine data such as the increasing trend in prescription drug abuse with the fact that some residents "do not know" the seriousness of prescription drug abuse, a prevention message becomes much more focused and tailored to the SEMCA region.

Special attention in prevention programs is needed to dispel the continuing myth of "everyone" using. In addition, there are still many youth who see no/little risk in regular marijuana use and cigarette use. The persistence of these numbers may indicate that there are higher risk youth who have different needs than traditional prevention programs are designed to reach. In general, additional resources for prevention should be devoted to high-risk youth, such as those who have parents who use substances, those who have had any child protective services involvement or other markers of trauma. Current research indicates that these youth are most at risk. Therefore targeting prevention among that population could produce important gains in reducing adult use.

The fact that so many residents see abstinence and willpower as very important to preventing and treating substance use is a major problem that requires attention from SEMCA and its providers. Support for the resources needed to assist those with treatment needs can be dependent on community members having

correct information about the complexity of substance abuse causes and treatment modes that are evidence-based.


# Chapter 5: Treatment and Prevention Services and Perspectives

## Introduction

Substance abuse treatment has evolved significantly over the past thirty years. As research exposed higher rates of use and a broader variety of drugs, it also expanded the modes of treatment available for interventions. Today substance abuse treatment is a well defined science, offering a range of behavioral and pharmaceutical interventions with a good success record (http://www.unodc.org/pdf/gap_toolkit_module8.pdf). Deploying the right interventions, however, is a challenge, when faced with complex co-occurring disorders, geographic diversity and limited resources. Policy makers and planners do their best work in this regard when they have data to inform decisions about what treatment should be available, where and at what cost. This chapter aims to meet this goal by providing evidence that can help shape substance abuse treatment and strategically address the needs for developing a continuum of recovery support.

SEMCA provides funding and is the central referral source for substance abuse treatment in out-Wayne and Monroe Counties for underinsured and uninsured clients. SEMCA funds a full range of treatment options through a select group of providers. When a request for proposals for service is posted by SEMCA, substance abuse treatment providers submit bids for services. The most complete and affordable bids are selected for the service period of one year, with a renewal option for years two and three. Service options include all levels of care from individual and group therapy, to intensive outpatient and residential, plus methadone maintenance and detoxification services.

Prevention of substance use and abuse is somewhat less well-defined than treatment, but there still exists a long tradition of prevention services and the interventions are more evidence-based than ever. Mainly focused at youth and young adults, prevention is described as primary, secondary and tertiary depending on the focus of the intervention or universal, selective and indicated, depending on the population served. Locations of prevention programs have varied over time but have most often been school-based and community-based after school programs. Recently, research has demonstrated that directing prevention at the individual level may not offer the most effective benefits and that environmental strategies – population based strategies – would offer greater effectiveness. SEMCA provides limited funds to community-based agencies that provide prevention programming for youth. These groups provide both individual level and environmental strategies for prevention.

This chapter is based on multiple data collection strategies. We conducted interviews with 30 consumers in treatment to understand their perceived needs for recovery and assessment of the quality services received through the treatment network. Focus groups with youth in treatment and their parents highlighted their unique experiences and point to a growing need for specialized care. 28 interviews with key-informants

captured the interface and perspective of those outside the service delivery system. Web-based surveys of providers documented their expertise in addressing substance-use disorders and yields information for future professional development. Finally, secondary data from the Care Net data system and administrative materials were collected to understand the patterns of treatment use and the processes SEMCA used to meet its contractual obligation as the administrative entity responsible for funding substance abuse treatment and prevention.

The chapter begins with a description of the SEMCA treatment service system. We describe services, availability, access, a view of the services people are utilizing, perceptions of treatment experiences, a variety of views on treatment quality and effectiveness, needs and barriers. Next we discuss prevention services perspectives and barriers, and finally client and provider perspectives of recovery. This last section includes provider thoughts about system readiness around Recovery Oriented Systems of Care.

## Section 5.1 Treatment Services and Clients

In this section we provide descriptions and data related to availability, access, episodes, experience, quality and effectiveness, and need. The goal is to provide an overview of the range of treatment services provided, a picture of the clients SEMCA serves and the perceptions stakeholders have about treatment services.

### Service Description

SEMCA currently funds 27 providers, who operate 47 programs. This list describes the core treatment services, but other services such as gender-specific treatment, relapse recovery, adolescent and older adult care, early intervention, and day treatment are offered at select sites. Of the 47 programs (total is greater as many sites offer multiple services):

- 35 sites offer outpatient services
- 21 sites offer intensive outpatient services
- 10 sites offer residential treatment services
- 5 sites offer detoxification services
- 3 sites offer methadone maintenance

SEMCA coordinates the screening and referral process for clients through the use of a 1-800 number and trained staff that manages the process. The 1-800 number is available on the website, through Michigan Works, and via a wide referral network, as well as partners, including law enforcement officers, social service agencies, schools, churches and more. Once screened, clients are referred to appropriate services, such as detoxification, residential, inpatient and outpatient treatment modes, methadone maintenance, and specialty services such as drug courts, wraparound and co-occurring treatment. According to state guidelines, clients must be screened and referred to appropriate treatment within seven days.

## Description of SEMCA clients

Treatment utilization data was analyzed to determine the number of individual clients served by provider agencies. A total of 9,106 unique clients were identified, by matching screening and admission dates during a three-year period.

As the table below shows, the average SEMCA client is male, white and has never been married. Nearly 80% of the clients are either unemployed, or not in the workforce for some other reason (e.g. disability). Only 8% of clients in treatment reside in Monroe County.

### Table 5.1 Description of SEMCA Clients

| | Total |
|---|---|
| Number of Admissions – Mean (StDev) | 1.95 (1.57) |
| Gender | |
| - Male | 5,631 (61.8%) |
| - Female | 3,475 (38.2%) |
| Race | |
| - 1: Native American | 69 (0.76%) |
| - 2: Asian or Pacific Islander | 20 (0.22%) |
| - 3: African-American/Black | 1680 (18.57%) |
| - 4: White | 6891 (76.18%) |
| - 5: Hispanic | 197 (2.08%) |
| - 6: Multi-Racial | 94 (1.04%) |
| - 8: Arab-American | 95 (1.05%) |
| Marital Status | |
| - 1: Never Married | 6107 (67.1%) |
| - 2: Married/Cohabiting | 929 (10.2%) |
| - 3: Widowed | 113 (1.2%) |
| - 4: Divorced | 1451 (15.9%) |
| - 5: Separated | 506 (5.6%) |
| Employment Status | |
| - 1: Employed, full time | 677 (7.4%) |
| - 2: Employed, part time | 1071 (11.8%) |
| - 3: Unemployed | 5956 (65.4%) |
| - 4: Not in the competitive labor force | 1218 (13.4%) |
| - 6: Retired from work | 0 (0.0%) |
| - 8: Not applicable to the person | 184 (2.0%) |
| County of Residence | |
| - Wayne County | 8338 (91.6%) |
| - Monroe County | 740 (8.1%) |
| - Other County | 28 (0.3%) |

An exploration of these cases over time shows that gender and race admissions were mostly stable for three years. While most clients were unemployed, over the course of three years, more clients were counted as not in the workforce, meaning they had stopped looking for work all together. This is not surprising, as the

job market was at its worst during these times. Nearly all (77%) treatment clients had at least one dependent. However, broken down by years, we see that more and more clients had zero dependents. Other major points include:

- 78% have 12th grade education or less
- All have income under $7,000/ year
- 41% have never been in treatment before, with new admissions growing over time
- 3% of clients were part of a Drug Court program, but the number of clients being referred from the criminal justice system increased to 15% over time.
- Nearly half of all clients had a co-occurring, mental-health diagnosis at admission
- Only 3% of clients are over age 55

A full report on this data can be found in the Appendix F (SEMCA Treatment Clients: Trend Comparisons).

## Treatment Availability

The first aspect of availability is the amount of service units available for SEMCA clients from providers. SEMCA contracts a certain portion of treatment units of service (15-minute service increments) for each type of service they fund. The tables below show the amounts of service provided in the major categories of treatment that providers offer.

As table 5.2 shows, in the last three fiscal years, SEMCA providers produced far fewer units of residential, short-term treatment from 2007 to 2010. In addition, intensive outpatient level 3 care has also been reduced by over one half in the past three years. Concurrently, there has been an increase in methadone maintenance units provided between 2007-08 and 08-09. Room-and-board units have also increased greatly. Most other services have remained fairly stable over time.

Table 5.2 Treatment Units of Service Summary of Top Categories

| | 2007-08 | 2008-09 | 2009-10 |
|---|---|---|---|
| Residential Short Term | 28615 | 12390 | 14979 |
| Residential Long Term | 1835 | 2088 | 2424 |
| Intensive Outpatient Level 1 | 6966 | 5709 | 7314 |
| Intensive Outpatient Level 2 | 1811 | 1783 | 2602 |
| Intensive Outpatient Level 3 | 14847 | 6324 | 6842 |
| Methadone Daily Dose | 29265 | 65600 | 50590 |
| Individual Therapy | 14045 | 19136 | 18213 |
| Group Therapy | 7393 | 9228 | 7385 |

| | 2007-08 | 2008-09 | 2009-10 |
|---|---|---|---|
| Case Management All | | 975 | 2288 |
| Individual Assessment | 2891 | 3304 | 4462 |
| Room and Board | 196 | 22176 | 25668 |
| Sub-Acute Detox (Med Monitored) | 3467 | 3358 | 3856 |
| *Total* | 111331 | 152071 | 146623 |

For those with co-occurring disorders, a slightly different array of services is billed. Table 5.3 provides details about service units primarily for the last two years; data for 2007-08 was not available. Here there can be seen a large increase in units for all intensive outpatient services, individual therapy, case management, and room and board.

Table 5.3 Co-occurring Disorder Treatment Services Summary of Top Categories

| | 2008-09 | 2009-10 |
|---|---|---|
| Residential Short Term | 4292 | 5787 |
| Residential Long Term | 111 | 283 |
| Intensive Outpatient Level1 | 2537 | 3904 |
| Intensive Outpatient Level2 | | 661 |
| Intensive Outpatient Level3 | 1202 | 2744 |
| Methadone Daily Dose | | 1089 |
| Individual Therapy | 1242 | 4223 |
| Group Therapy | | |
| Case Management All | 975 | 2288 |
| Individual Assessment | | |
| Room and Board | 6629 | 9129 |

In their survey, community residents were asked if they felt that there were **enough programs** in their community. Less than half (44%) agreed that there are enough treatment programs, 39% disagree, while 14% did not know. Two-fifths (40.3%) thought there were enough prevention programs. About half of the respondents also felt their community is well prepared to deal with alcohol and drug use (52.8%) and is doing everything it can to address alcohol and drug problems in their community (50.3%)

*Wait List.* Waiting lists for services are another aspect of availability and access. Like many aspects of the Access Management System, which all coordinating agencies maintain, the State Bureau of Substance Abuse and Alcohol Services sets forth a comprehensive list of rules. Most clients must be offered admission to services within 14 days, unless they are a pregnant and then the timeframe is 48 hours. All systems strive to meet these goals by having a network of providers to meet service demands. However,

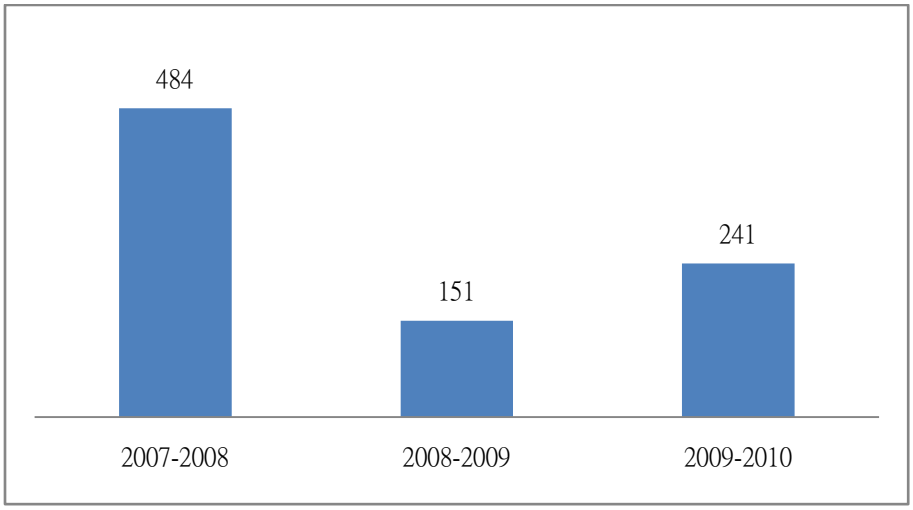
there are times when clients face a delay to entering treatment. Because client readiness can be tenuous, getting into treatment as soon as they declare readiness is important. For other clients the waiting list is a particularly onerous barrier.

> "The waiting list, that was a little bit of a barrier, I have a wife of 13 years, we have 2 kids and what was a barrier this time was she was placed on a different waiting list so, and we were really out there living in the car so…"

The data tables below sets out a summary of wait-list information from across all providers. A total of 876 clients were on waiting lists across three years of treatment records. Using the base of 9,106 treatment clients, this would mean that about 9% of clients face some sort of delay. This is a fairly low figure and speaks well of SEMCA's treatment system. Some providers of residential treatment had wait lists each year, perhaps owing to their location within the community and the need for treatment. Specialized treatment for intravenous drug users also had fairly consistent wait lists for clients.

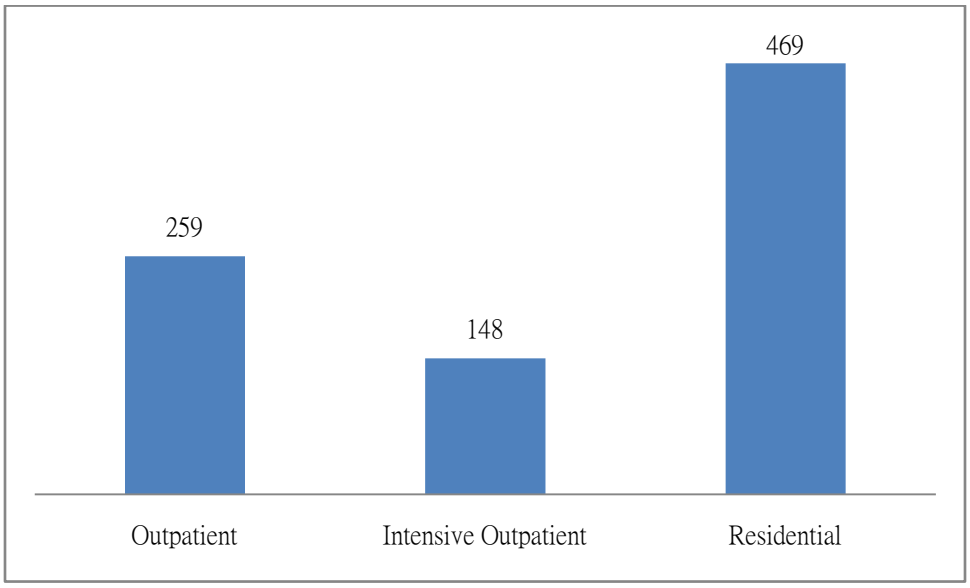
Outpatient waiting numbers declined greatly from 08-09 to 09-10, while intensive outpatient waiting lists dropped from 07-08 to 08-09 and remained low. Residential treatment wait lists were managed well in 2008-2009, but were somewhat higher in both 2007-08 and 2009-10 (see Appendix G for tables)

Figure 5.1 SEMCA Wait List Totals for Top Service Categories 2007-2010




The following figure describes the movement of wait list figures for the past three years.

Figure 5.2 Waiting List Totals for 2007-2010 by Type of Treatment




## Treatment Access

Accessing treatment is necessary for successfully entering and completing substance abuse treatment. The SEMCA website offers a description on: **"How do you access substance abuse services through SEMCA?"** The Access Center is open for calls 24hours a day/7days a week. After clients call the Access Center they receive verbal screenings with a trained staff member. The screening uses the American Society of Addiction Medicine (ASAM) Criteria on the Care Net, web-based computer system to determine the appropriate level of care for the client. Clients are offered a choice of available services and whenever possible receive an appointment for the same day or the next day.

SEMCA's Access Management System (AMS) receives thousands of calls each year from people seeking help or information about treatment services. The SEMCA phone system records indicate:

| | |
|---|---|
| FY 07-08 | 51,271 calls |
| FY 08-09 | 53,308 calls |
| FY 09-10 | 51,957 calls |

As can be seen, calls to the AMS system remain steady, with a slight increase in 08-09. These fairly large numbers may indicate a significant need for treatment, perhaps prompted by a faltering state economy. Units of service funded matched this trend, increasing somewhat in 08-09, but dipping a bit in 09-10, meaning that admissions also declined despite continuing need.

Of all the calls received, a lesser number receive a full screening for treatment based on their eligibility for services. Eligibility for services includes providing proof of Out-Wayne County or Monroe residence (e.g. driver's license, bills) and demonstrating financial eligibility, such as Medicaid. SEMCA data shows that 12,088 client screenings were conducted on 9,106 clients for treatment during the three-year time period. Some clients had been screened more than once. After clients are matched by screening data, we found 17,774 cases of admissions. A somewhat higher number of admissions were in the dataset, but not all matched to a treatment episode.

In surveys with substance abuse prevention and treatment providers and their executive directors, we asked respondents how they would rate the access to substance abuse treatment and mental health services in the SEMCA region on a one to four scale (Poor, Fair, Good, Excellent). As table 5.4 shows, providers view on access to treatment is only fair to good. Prevention providers saw mental health as more accessible than substance abuse treatment, while treatment staff and directors had a more positive view of access to substance abuse treatment.

Table 5.4 Means Score on Access Ratings from Providers

| How would you rate the… | Prevention Providers | Treatment Providers | Executive Directors |
|---|---|---|---|
| …access to substance abuse treatment in your community | 2.3 | 2.6 | 2.5 |
| …access to mental health services in your community | 2.6 | 2.4 | 2.2 |

In interviews, key informants believe that access to treatment depends on clients' resources: those with insurance or money can find treatment. However, those who are poor and rely on public funding, have "difficulty" finding treatment. When probed about why they think access to treatment is low, participants noted that they don't see or hear any advertising for treatment services, and these providers are only familiar with one treatment facility in their area. On the other hand, a few people commented that there are "many treatment providers", that they are spread across Wayne County, and that they have "never heard someone unable to find treatment". Those working with homeless clients note that access is more challenging and, at times, homeless clients resort to hospital stays because treatment is not available. All key informants seem to acknowledge that access to outpatient care is easier than the higher levels of care such as inpatient or residential.

From the maps in Chapter 3, we see another access issue is present. With the exception of Highland Park and Ecorse, treatment facilities are not located in the cities with the highest number of treatment episodes. This appears to be a mismatch of services and need. In addition, some funded locations are in the city of Detroit. While this may be a benefit to those in Detroit, Highland Park and Hamtramck, seeking treatment in Detroit for other out-Wayne County residents may be a barrier, as transportation and perceptions of

safety can influence decisions on entering treatment. In addition, the locations shown in the map point out that no treatment is available in the southern most portion of the county, while treatment episodes are fairly to very high in several communities located in that area.

Related to the issue of access is the decision by clients to seek treatment. We asked adults in treatment, if they **received any help to find information about treatment.** Most adult respondents (78%) said 'yes' they did contact someone for information. The most frequent response was that they called SEMCA or that they sought help from a family member or friend who directed them to SEMCA.

During interviews with treatment clients, they were asked how they learned about SEMCA and were presented with a list of options; the table below summarizes their responses. Most clients learned about SEMCA from family or friends, with the second most frequent response being by service agency referrals. In general the most common referral then was from a person who may have known about their condition and sought to assist them with getting help. Few clients found out about the treatment services from work, newspapers, or the phone book.

Table 5.5 Clients Familiarity with Sources of Referrals

| Potential referral sources where you might have heard about SEMCA for treatment. (N=29) | | |
|---|---|---|
| | Yes | No |
| Family | 52% (n=15) | 48% (n=14) |
| Friend | 52% (n=15) | 48% (n=14) |
| Other County Agency* | 47% (n=16) | 53% (n=18) |
| Service Agency Referral* | 44% (n=23) | 56% (n=29) |
| Brochures | 24% (n=7) | 76% (n=22) |
| Website | 24% (n=7) | 76% (n=22) |
| Health Fair | 14% (n=4) | 86% (n=25) |
| Legal System | 11% (n=3) | 89% (n=25) |
| Phone Book | 10% (n=3) | 90% (n=26) |
| Newspaper | 4% (n=1) | 96% (n=26) |
| Workplace | 3% (n=1) | 97% (n=28) |

*N size is larger for some as named sources were included with best fit on list

Via the phone survey, community residents were asked if they would **know where to go for help** if they or someone in their family were abusing alcohol or other drugs. 62% agreed that they knew where to seek help, while 32% disagreed and 6% did not know. Over half of these participants (57.2%) were also able to identify a specific place where someone could get help. Statistical analyses showed participants who were able to identify a specific place where someone could get help were significantly more likely to be married, have a history of smoking (lifetime), and have lower levels of education (i.e. high school diploma or less). They identified hospitals and doctors, social service agencies, places of worship and 12-step programs as sources for help.

We also asked current clients **why they decided to seek treatment** when they did. The responses were overwhelmingly similar. Adults described being "tired"; tired of living a life that was "unmanageable" and generally difficult, since most were losing money, housing, and relationships. They pointed out that health and legal issues arose from drug use, as another motivation to seek treatment. Youth and their parents describe the circumstances that lead them to treatment in different terms. Most youth describe the route to treatment as "getting caught". Some were caught directly using or selling drugs, but more note that they were in a fight with another youth and, in the course of the investigation of that they were found to be using drugs, including alcohol. Parents concurred with the notion that problems escalated from curfew violations to fights, but few knew the root cause was drug use until their child was involved with law enforcement.

Adults, youth and their parents were also asked to describe what would have **helped them get treatment earlier** than they did. In a variety of ways, many clients expressed that treatment was delayed due to a lack of readiness. Some talked about not feeling that their use was a problem, or just not being at a place where they wanted to be in treatment, and not having the readiness to understand their disease. Three clients talked about being on a waiting list as a reason for at least a temporary delay in treatment. While for some a waitlist is not a problem, as one client noted: "just having to wait to get in was terrible." A few noted a lack of social support from family and friends. They conveyed a desire to have someone seek help for them or ask the client to seek treatment. Only one person talked about the cost as a barrier.

Youth clients had just two replies about **getting help sooner**. A few noted that they only way they would have gone to treatment sooner were if they had been caught by law enforcement sooner. They noted that there seemed to be little that parents or others could do to motivate their treatment stay. Although one youth did note that if "people had been paying attention more" they might have noticed the youth needed help through treatment. Parents of youth clients spoke about a lack of communication and support from others. They complained that school officials were slow to inform them of issues of class skipping and behavior changes, and that probation officers and police did not follow up on contacts which delayed the problem identification process. They also talked about the need for more work on the part of schools to provide education for their children and for themselves about drugs. Another group spoke about the stigma associated with drug use and treatment and the need for more confidentiality for those seeking help.

When provided with a **list of reasons why a person might seek treatment**, the top three responses were 1) a need to change lifestyle (100% yes), 2) financial reasons and family-related issues (72% yes), 3) physical-health related (69% yes). When asked about "any other" reasons, adults cited housing concerns, relationship issues, pressure from friends, isolation/loneliness and stigma as reasons to seek treatment.

Adults, youth and parents were also asked about their **thoughts about treatment before they were admitted**. Adults varied in whether or not they thought treatment would be helpful. Some described the environment as "structured" and "scheduled", but also safe and supportive. Some knew they would talk with a counselor and get "tools and knowledge to help you along the way with recovery". But a few also noted that the process would be difficult at first. Youth in treatment had few thoughts, but their ideas were fairly negative. Two youth described treatment as being like jail, including "being locked in a room" and being "forced to do stuff". Three believed it "wouldn't work" and that they would just come out and use again. Parents had mixed views, with a couple believing it would be beneficial, allowing the youth and family to start exploring issues. Some noted that they had watched treatment work for some people, but not for others. And finally one parent did not see much value in treatment.

## Treatment Episodes

Of those 12,088 screened for treatment, 11,791 continued on to treatment providers for service. This leaves 297 screenings that were found with no corresponding admission record. These 11,791 clients report the primary drug of choice as alcohol (40%) and opiate (30%). These drugs are also the two that the southeastern sub-state region reports higher use of than state and national averages. Cocaine (12%) and marijuana (10%) are next in ranking of primary drug of choice at admission.

The tables below provide descriptive information about the treatment clients. Here we describe treatment episodes, which we define as the time of treatment from one screening to a new screening. First, most clients wait less than 7 days to enter treatment once they are admitted. However, 34% wait longer than 8 days for treatment. Next is the length of stay; a key variable whose increase is correlated with success in treatment. Almost 60% are in treatment for 31 days or more, however about 18% stay engaged for less than one week. Most clients enter treatment in an outpatient setting or an intensive outpatient setting. Nearly 30% enter treatment by going to residential detoxification first. With respect to discharge status at last admission, our data shows that nearly 28% completed treatment, but 40% left against staff advice. Many others transferred to other treatment facilities (15%) as may be appropriate for staging of treatment

Table 5.6 Time from Screening to Admission for Treatment

| Time from Screening to Admit | N | % |
|---|---|---|
| 0: 0 (Same Day) | 2093 | 17.8 |
| 1: 1-2 days | 2102 | 17.8 |
| 2: 3-7 days | 3571 | 30.3 |
| 3: 8-14 days | 2062 | 17.5 |
| 4: 15+ days | 1963 | 16.6 |

Table 5.7 Treatment Episode Length of Stay

| Length of Stay | N | % |
|---|---|---|
| 0: 0 (Same Day) | 373 | 3.2 |
| 1: 1-7 days | 1821 | 15.4 |
| 2: 8 -30 days | 2612 | 22.2 |
| 3: 31 - 90 days | 3402 | 28.9 |
| 4: 91 + days | 3583 | 30.4 |

Table 5.8 Type of Treatment Service at Admission

| Service Category | N | % |
|---|---|---|
| Outpatient | 4922 | 41.7% |
| Residential – Detox | 3381 | 28.7% |
| Residential – Short Term | 1028 | 8.7% |
| Residential – Long Term | 53 | 0.4% |
| Intensive Outpatient | 2407 | 20.4% |

When the data is explored for gender variations few significant distinctions are found. First, males represent 61% of the treatment admissions. There are almost no gender differences for wait time to enter treatment, length of stay, or discharge category. Men are slightly more likely to be admitted to detox and short-term residential, while women have higher rates of admission to intensive outpatient services. This may be a result of the higher childcare burden for women which prevent them from entering residential care. Finally, the average age for clients in treatment is 33.6 years.

## Discharge Status

Analyses of SEMCA treatment discharge data was used to compare demographic characteristics of those clients who completed treatment, left against staff advice, continued onto another form of treatment or were discharged for other reasons. Appendix H offers the complete data chart, but highlights include:

- Males were more likely to complete treatment than females (29% vs. 24%); however females were more likely than males to continue in treatment (36% vs. 32%).
- Whites were more likely to complete treatment than Blacks (33% vs. 26%); however Blacks were more likely than whites to continue in treatment (32% vs. 26%).
- Marital status did not seem to impact completion rates, with all groups reporting between 23% and 28%.

- Clients with no dependents were more likely to complete treatment (30%); however, clients with dependents were more likely to continue in treatment than those without dependents (35% with 1 child, 34% with 2 children, 31% with 3 or more children vs. 30%).
- Clients involved in child welfare were more likely to leave treatment against advice (33% vs. 26%), but just as likely to continue in treatment (33% vs. 34%).
- Those clients employed full or part-time or retired are more likely to complete treatment (37%, 35% and 34% respectively) than the unemployed (23%).
- Those with the lowest education (less than 8th grade) were more likely to complete treatment, (34%) versus those who have some college (26%); those with education between 9th and 11th grade were more likely to leave against staff advice, (30%) versus those with a college degree (21%).
- Clients with incomes over $7,000 were more likely to complete treatment, (32%) compared to those with incomes between $1,000-$7,000 (25%), and compared to those with less than $1000 (24%).
- About one-third (34%) of clients in outpatient services complete treatment, one-third leave (34%) and 13% continue with another form of treatment. Among those in intensive outpatient treatment, 23% complete, 28% leave and 33% continue in treatment. Clients in residential, long-term treatment are likely to complete treatment (56%) versus those in other types of residential treatment. As might be expected, those in detox and short-term residential are more likely to continue with some other form of treatment.
- Clients with alcohol (35%) and those with marijuana (39%) as their primary drug of abuse are more likely to complete treatment, compared to those with cocaine (22%), opiates (13%) or other (20%) as their primary drug of abuse.
- SEMCA providers with the highest rates of treatment completion include: Wolverine (90%), Sacred Heart Evangeline (58%), Community Care Services-Lincoln Park (49%); Community Care Services-Taylor (43%) and Hegira-Livonia (42%).
- SEMCA providers with the highest rate of clients leaving treatment include Black Family Development, Inc. (50%), Eastwood-Dearborn (48%) and Catholic Charities-Monroe (47%).

Compared to statewide coordinating agency, based on TEDS data, SEMCA has a somewhat lower rate of completion of treatment for 2009 and 2010. The state averages for continuing in treatment were 32% and 31% respectively, while SEMCAs rate was 24% each year.

## Treatment Experience

As part of the exploration of the quality of treatment being provided, our researchers asked clients to provide further details about their treatment experience. This information offers context to the responses about treatment quality and effectiveness in other sections of this chapter.

First clients were asked to describe what they thought **they would get out of substance abuse treatment**. Here many focused first on "get(ting) clean" – meaning they would be able to detox, have help with withdrawal and use this as their first step in a process. After they had time without drugs, they hoped treatment would be a place to "start over again" in a sober lifestyle. They saw treatment as a way to improve their lives and get a "foundation for sobriety," with the knowledge and tools they need. Youth replies focused mostly on what they learned, including how to "control yourself and not do irresponsible things", how to distance themselves from their triggers and the risks of use. One also mentioned that treatment led them to talk about things "I never would have before". Parents hope their children would gain knowledge to overcome use and that those parents would "support them in the right ways". Finally they also hoped their children would be able to better manage the challenges of life.

In interviews, adult clients, youth and parent focus group participants were asked to describe their **most recent treatment experience**. On the positive side, adults talked about treatment as a place where they were able to learn about their addiction, about themselves and hope to be sober and cope with life. In particular a few participants said that other clients provided them with insight and empathy that was beneficial to them. A few noted that they had a good experience and that the staff was helpful. Out of 19 interviews, nine clients shared some negative encounters as well. For some, treatment was disrupted by staff who they described as "disrespectful", "oblivious" and "angry". Others talked about the treatment facility as a place full of "drama". This drama was highlighted by clients whose focus was on extraneous things rather than treatment. Some noted that many people are more interested in finding a new relationship, or just not being attentive to classes. Finally a few clients noted that their treatment facility had an issue with drugs being in the center and this created a chaotic environment, leading to their doubt about the effectiveness of the treatment. The following exchange points to how some clients experience treatment.

> "C: This facility [has]a lot of drama, I kind of feel like I'm in high school …I: What kind of drama? C: It's just a lot of high school and people making fun of people and drugs, and people just not being serious about their recovery, and I guess before I would have been mixed up in it probably. I: You said drugs, so there have been people using? C: Well before I came in I was really scared because they kicked out people because there was drugs in here, and my counselor told me that there was drugs in here…"

The next quote underscores the differences in attitudes that vary by facility:

> " Yeah, I love this place, like I like it here way better than anywhere else I've ever been. You know the staff is great, the nurses are great, even the food is not bad ….I like that they have the medical detox."

Youth in focus groups described both negative and positive experiences with treatment, leaning more toward the negative. Youth in two sessions used the word "horrible" to describe the experience – pointing

to angry, judgmental staff, and being "forced" to attend groups. A couple viewed treatment as 'pointless' and noted they wanted to "do it (use) more because they spent so much time talking about their use. One person noted that the expectations of treatment were a burden because of all of the required elements and the barriers to completing those tasks.

Finally a few youth had negative responses to the AA experience. One felt that being with much older and most male attendees was not teen-friendly. Also two people did not like the focus on Christianity and the lack of acceptance of other world views and religions that they embrace.

On the positive side, a few youth did enjoy talking with peers in group sessions to "get things off (their) chest". One noted that, after a period of resistance, some youth do want to change and benefit from treatment. These experiences may be colored by the fact that nearly all youth are mandated to treatment by a court order. In addition, youth may be more influenced by negative peer perceptions, so perhaps the results are somewhat biased by the circumstances.

Parents of youth in treatment talked about the difficulties they had in knowing what to expect and how to feel about treatment. Several pointed out that they struggled early on, not feeling they or their child needed to be in treatment, and not knowing what to expect. Although difficult, most parents felt that once they opened up to the process, they found treatment beneficial for their child and for their relationship.

### Quality and Effectiveness

In the online surveys, prevention and treatment staff and directors were asked to **rate their perceptions of quality** on a one-to-four scale (Poor, Fair, Good, and Excellent). From this table you can see that treatment providers have a slightly lower average perception of quality, perhaps owing to their first hand knowledge of the field. The executive directors had the highest average rating of quality, perhaps due to their responsibilities and overall view of the agency.

Table 5.9 Provider Means Score on Quality Ratings

| How would you rate the… | Prevention Providers | Treatment Providers | Executive Directors |
|---|---|---|---|
| …quality of substance abuse treatment in your community | 2.6 | 2.2 | 3.0 |
| …quality of mental health services in your community | 2.6 | 2.5 | 2.6 |

In interviews with various treatment-related persons, we probed **perceptions of quality**. Few were able to provide strong opinions about the quality of treatment available in SEMCA. Most members of the SEMCA Advisory Board said they lack good information or data. They base opinions on what they have heard from

SEMCA, and perceive the quality of treatment to be good. Beyond this, they were concerned about the lack of treatment options which may be impairing quality of treatment. DHS workers had mixed feelings about treatment quality. Some felt treatment quality was poor due to their perceptions of a lack of success in their clients. These workers feel treatment needs to be longer to ensure success. A few know good resources for treatment, so they were able to express more positive feelings about treatment quality.

In a series of 18 interviews with key informants in the community, four respondents believed they did not have enough knowledge to make a statement about treatment quality. Most (8) describe treatment quality as fair to good – using descriptions like "not the greatest" or citing a lack of treatment where the problems are greatest. Others say "fair to good" because they would like treatment to be longer and/or more intense and would like to see more success from treatment. Four key informant interviewees describe the system quality as excellent. They point out that there are many providers and caring people, and that the system is improving with evidence-based treatments.

In the five interviews with older adult providers, 3 of 5 say quality is poor, citing the lack of treatment. One says they do the best with what they have, and is not sure if it could be better, while the last feels there are lots of options available and that the treatment is appropriate for those identified with problems.

In the course of interviews, **adult clients were also asked to rate the quality of treatment** they were receiving. As the table (n=18) below shows, clients had mostly favorable ratings regarding quality of care, while only 6% rated the quality as low.

Table 5.10 Client Perceptions of Quality of Care

| Mean | 1 = very low | 3 = low | 5 =average | 7 = high | 9 = very high |
|---|---|---|---|---|---|
| 3.67 | 6% | 0% | 33% | 44% | 17% |

The **perceived effectiveness of treatment** was also probed. The following table summarizes the responses of key informants, community residents and adult clients. All groups were overwhelming positive about their view of treatment effectiveness

Table 5.11 Perceived Effectiveness of Treatment

| Treatment programs are effective in addressing alcohol and other drug problems… | Agree | Disagree | Don't know |
|---|---|---|---|
| Key Informant Interviews (N=12) | 83% (n=10) | 8.5% (n=1) | 8.5% (n=1) |
| Community Survey (N=522) | 86% (n=448) | 14% (n=74) | 0% (n=0) |
| Adult Interviews (N=18) | 95% (n=17) | 5% (n=1) | 0% (n=0) |

Key informants were asked to provide additional comments on the effectiveness of treatment. While they had few comments, they expressed some ambivalence. This is a result of their belief that treatment effectiveness is dependent on the desire of the client, their preference for resources for prevention, and their understanding that treatment is a process that requires time.

## Treatment Needs

When asked if certain populations **have unmet service needs related to getting help** for their substance abuse problem, prevention staff and executive directors responded "yes" slightly more often than treatment staff. These differences perhaps stem from their proximity and relationship to clients.

Table 5.12 Provider's Perceptions of Unmet Service Needs

| Are there unmet service needs? | YES | NO |
|---|---|---|
| Prevention Provider Staff | 70% | 30% |
| Treatment Provider Staff | 53% | 47% |
| Executive Directors | 68% | 32% |

The populations most identified as "in need" of service include youth (22), senior citizens (15), those with co-occurring disorders (7) and development disabilities (7). When asked about groups with unmet needs, others identified conditions and factors that are often seen as barriers, such as poverty, lack of parents and lack of transportation.

Providers were also to give their perspective on the need for specific strategies around substance abuse prevention and treatment. Respondents were given a list and asked to rate each item on a 1 to 7 scale (1=no/little need, 7=great need). As table 5.13 shows, there was a great deal of agreement between providers on the strategies. The one exception is the use of stricter laws and penalties. Here, those in prevention were more likely to support this as a need, than were those in treatment or were the executive directors, who were least likely to endorse this strategy. Support groups for families and children and treatment for co-occurring disorders were viewed as the highest strategy need. Respondents feel all items are generally needed in the region.

Table 5.13 Provider's Perception of Need for Policy and Practice Strategies

| Need for the following strategies in the SEMCA region | | | |
|---|---|---|---|
| | Means by Type | | |
| | Prev Providers | Tx Providers | Exec Directors |
| Outpatient treatment | 5.7 | 6 | 5 |
| Stricter laws and penalties for use | 5.1 | 4 | 3 |
| Recovery programs | 5.9 | 6 | 5 |
| Residential/In-Patient treatment | 5.4 | 6 | 5 |
| Prevention programs | 6.1 | 6 | 5 |
| Drug courts | 5.6 | 5 | 5 |
| Support groups for children and families | 6.2 | 6 | 6 |
| Treatment for co-occurring disorders | 6.2 | 6 | 6 |
| Case Management | not asked | 6 | 6 |

Providers were asked about **how SEMCA could assist them** with developing a Recovery Oriented System of Care (ROSC). Providers expressed a need for trainings, forums, expertise and materials to help them understand ROSC. They also noted the need for an increase in funding and the types of services funded for recovering residents. This includes funding for peer support and recovery homes and authorizations for more services to clients. The provider survey also inquired about provider recommendations to address needs for services. Prevention providers expressed a need for training and support for evidence-based practices. Treatment providers focused mainly on the need for more support for longer-term care and more flexibility in treatment stays. Executive directors would like to see SEMCA change by paying for family sessions and to fund more treatment sessions. Another need related to this was a call for new rates of reimbursement for psychiatric services for co-occurring work.

In interviews with key informants, most generally felt that clients have many **needs that are not being met**. They point to the fact that, at times, clients are "hard to reach", making it more difficult to provide help. Two other barriers were prominent in the discussion: inadequacy of resources to provide for needs and the difficulty for clients to overcome problems of stigma, before they can even access assistance. The most noted need was health care to deal with medical problems. In addition, respondents pointed to basic requirements such as housing, as well as ancillary services such as transportation and employment help.

Respondents from the community survey point out that:

- They had a friend or family member that needed treatment for their alcohol or drug use in the past year (22%).

- While only 60.5% of those friends or family members who needed treatment made an effort to get treatment, most of those friends or family members (90.6%) who made an effort to get treatment did receive assistance.

Adult clients were also asked to share the needs they had which were not addressed in treatment. In a positive note from this small sample, eight clients felt that all needs they could identify had been met. From those who did have comments, two major needs were mentioned. First, five clients pointed out that they needed additional help with their mental health, especially for follow- up care, once they were out of the treatment facility. Second, clients would like help finding employment and building job skills. Other items mentioned were the need for health care, housing, coping skills, and emotional support.

### Treatment Barriers

Using a variety of data collection methods, we sought to learn what treatment providers, key informants, clients, and the community thought were major barriers to seeking treatment. Items were mainly framed in terms of client barriers, but we also gathered information on barriers that influence how providers implement treatment.

Treatment providers were asked to select client barriers to treatment from a list of 13 options. The main barriers to treatment identified include a lack of transportation (15%), a lack of insurance (14%) inability to pay (11%) and poor insurance coverage (10%). Low on the list of barriers was appropriate services not available and treatment not available in their community. This underscores their belief that appropriate treatment is available, but that clients need better ways to afford and access that treatment. See Appendix J for the complete table.

When asked about barriers, executive directors of funded treatment and prevention agencies noted difficulties with billing and reimbursement issues (18%), psychiatrist/physician staffing issues (15%), and the need to coordinate with local mental health agencies (11%). Similar to the prevention providers' responses below, licensing and regulatory standards, management support and education were seen as barriers by very few respondents. See Appendix K for a complete table.

Respondents to the community survey were asked about barriers that their friends and family have faced when seeking substance abuse treatment. As the table below notes, not finding the type of treatment they wanted and a lack of or inadequate health insurance were the major barriers.

Table 5.14 Community Residents Perceptions of Barriers to Treatment

| Barriers for your friend/family member who sought treatment: | (N=171) |
|---|---|
| Lack of/inadequate health insurance | 38 (22.3%) |
| Transportation | 21 (12.3%) |
| Did not find type of treatment they wanted | 45 (26.3%) |
| Person not ready to stop using | 19 (11%) |
| Did not know where to get treatment | 19 (11%) |
| Stigma (negative opinion of others) | 29 (17%) |

In addition to this list of barriers, two responses signal an attitude that may be a barrier for treatment and recovery from substance use. Three quarters of participants (76.5%) felt that total abstinence is the only way to overcome alcohol and drug problems. Also, just over half of survey respondents (54.3%) agreed that if an addicted person has enough willpower, he or she can stop abusing drugs or alcohol. These thoughts may be barriers to signs of the stigma users face and lead to a less welcoming community environment to support recovery.

As described above in the access section, clients overwhelming noted that their own lack of readiness to enter treatment was the major barrier they faced. This was followed by access issues and low family support. Parents of youth in treatment felt that the people and systems around them, including their school and police officers, were barriers to getting help as they did not offer support and, instead, stalled efforts for help.

## Section 5.2 Prevention Services

This section provides some details about the substance abuse prevention services offered in the SEMCA region. Prevention services are provided fairly traditionally here, with a focus on youth services. Recently the service continuum has increased to include some awareness of and funding of environmental strategies to target community norms in addition to individual and school-based programming.

### Description of Prevention Services

SEMCA ascribes to a wide variety of goals for substance abuse prevention. The goals reflect local, state and national concerns, including raising awareness about the dangers of use and building sills for positive youth development and resistance skills. There are two points that relate to community-based prevention, including mobilizing communities and supporting policies that promote healthy lifestyles and changes community norms.

A number of activities and events take place to promote these goals, but the primary focus of the efforts is the distribution of funds to providers. Each year SEMCA puts out a Request for Proposals (RFP) for Prevention Services. The RFP generally describes the types of services that are fundable, SEMCAs

expectations regarding services, eligibility criteria and other administrative details. For FY, 2012 a total of $1,559,444 was distributed to 19 providers, of which seven were community coalitions. Units of service varied from 0 to13, 605 units per year via the contracts. A total of 77,807 units of service are covered with this funding for FY 2012, according to documents provided by SEMCA's Prevention Services Division. Beyond direct funding, SEMCA provides technical assistance to two other community coalitions, and partners with two Drug Free Communities Grantees, one in Wayne, and one in Monroe County. A table of current prevention funding is provided in Appendix I.

The location of service covers 25 out-Wayne County municipalities and 3 contracts to Monroe County, which represents a very wide service area across the region. The types of services provided are relatively similar, across the agencies funded. Of the seven coalitions funded, two are using the funds for coalition building and community mobilization. The other five point to different strategies to "reduce youth access to alcohol and tobacco." The strategies include town hall meetings and awareness events, prescription drug awareness and one take-back event, alcohol compliance checks and vendor education, and two photo-voice projects. Two groups noted "social marketing" or community awareness events and participation in Project Sticker Shock, a national model to place information stickers on multipacks of alcohol warning about the dangers of buying for minors.

### Perceptions of Prevention Services

In the web-survey of prevention providers and executive directors, participants were asked to rate the availability and quality of prevention efforts in the community. Table 5.15 below shows that almost no prevention providers view availability as excellent, but 72% see the quality of prevention as good to excellent. Additionally, 17% of executive directors (Table 5.16) view prevention availability as good to excellent and about 22% view quality of prevention efforts as good.

Table 5.15 Perceptions of Prevention Providers

| | N | M | 1- Poor | 2- Fair | 3- Good | 4-Excellent |
|---|---|---|---|---|---|---|
| How would you rate the **availability** of prevention efforts in your community? | 31 | 2.5 | 10% | 32% | 55% | 3% |
| How would you rate the **quality** of prevention efforts in your community? | 32 | 2.8 | 6% | 22% | 59% | 13% |

Table 5.16 Perceptions of Executive Directors

| | N | M | 1- Poor | 2- Fair | 3- Good | 4-Excellent |
|---|---|---|---|---|---|---|
| How would you rate the **availability** of prevention efforts in your community? | 23 | 2.4 | 31% | 52% | 13% | 4% |
| How would you rate the **quality** of prevention efforts in your community? | 23 | 2.0 | 22% | 56% | 22% | 0% |

Respondents in the community survey were more likely to disagree (45%) or not know (15%) if there were enough programs in the community to help prevent substance use problems. These results may provide support for additional programming to address the issue.

## Barriers to Promoting Prevention

Prevention providers see the major barrier to participating in prevention as lack of transportation (18%). The next three ranked barriers were stigma (13%), unsure of how to access services (12%), and a lack of programs for younger youth (11%). Many other items pointed to as barriers generally relate to inconveniences (bad day/time, too long) and access barriers (work during program, program closed to registration, culturally inappropriate). Prevention providers were also asked about barriers to planning and implementing effective services (Table 5.17). While provided a list of eight items, the providers reported few major barriers to planning effective services. Lack of community support and physical resources were noted as the most frequently occurring barriers. Licensing and regulatory standards and lack of management support were almost never cited as barriers for services.

Table 5.17 Prevention Provider's Perceptions of Barriers

| | M | 1- Never | 2- Occasionally | 3- Fairly Often | 4- Very Often | 5- Always |
|---|---|---|---|---|---|---|
| Licensing and regulatory standards | 1.6 | 55% | 34% | 7% | 3% | 0% |
| Billing and reimbursement issues | 2.3 | 29% | 43% | 18% | 11% | 7% |
| Evidence-based or preferred practices | 2.0 | 26% | 52% | 19% | 3% | 0% |
| Education or training | 1.9 | 26% | 55% | 19% | 0% | 0% |
| Physical Resources | 2.2 | 23% | 51% | 10% | 16% | 0% |
| Management Support | 2.0 | 27% | 56% | 7% | 7% | 3% |
| Community Support | 2.8 | 6.5% | 48% | 16% | 26% | 3.5% |
| Staff turnover | 2.2 | 23% | 53% | 7% | 17% | 0% |

## Section 5.3 Recovery

Another important piece of the substance abuse puzzle is the movement toward recovery. A recent study commissioned by The Partnership at Drug Free.org found that one in ten Americans see themselves as in recovery (http://www.drugfree.org/newsroom/survey-ten-percent-of-american-adults-report-being-in-recovery-from-substance-abuse-or-addiction).Recovery is a process that often involves moving forward and backward and forward again toward treatment goals.

### Client Perspectives on Recovery

In the interviews, treatment clients were asked to say **what "recovery" means to them**. While the responses varied greatly, there was, as expected, a significant amount of overlap that generated similar themes. Recovery was first defined as being "clean and sober" (n=13). Equally important and related was "to use new skills to live a better life and make better choices" (n=13). Similar replies talked about being a better person, having better relationships and a "normal life". Another set of replies dealt with spiritual concerns and 12-step related items, such as taking it "one step at a time", belief in a higher power, surrendering, self-awareness and making amends. In general, these respondents are in sync with their thoughts about what recovery might look like. For most clients there is not one single component such as this typical client response from an interview session: *"Staying clean off of everything, working a program like AA or NA, get involved, getting a sponsor, and getting my family back, my daughter, and not causing anymore problems in my life."*

When asked about their **recovery goals**, clients responded with items somewhat similar to their definition of recovery, but also included some traditional activities and plans that may have been delayed due to their use and treatment. The most popular responses were about finding jobs, school (n=18) and other items of a "normal life" such as playing music, going to church and getting their own place to live. Similar to their response to the definition of recovery, many mentioned wanting to stay sober (n=16), working their 12-steps, being physically healthy, and controlling their urge to use. Another set of replies talked about rebuilding relationships with family and friends and being an active member of the community. Other replies include items related to personal development (being happy, putting life back together, having things to be proud of).

One important part of recovery is the ability to manage triggers through skills learned in treatment, and through support received from others. When read a list of 13 **potential triggers that could be a reason for relapse,** 23 respondents gave a "yes" reply to nearly all items. It must be noted that while 29 participants were interviewed responses to this item were restricted to those who had previous experiences in treatment. Nearly 90% replied yes to items related to negative feelings (angry, down), relationships (non-spouse/partner), social expectations and psychological cravings. Approximately 80% gave positive responses to feeling good, relationship with partner, signs of withdrawal, and physical cravings. The lowest

rated item was "using other drugs", to which 15 of 23 said yes. Other replies included loneliness, mental health issues, and worry over a lack of money and work.

Table 5.18 SEMCA Client Reports on Potential Triggers for Relapse (N=23)

| List of potential triggers that could be reasons for relapse. | | |
|---|---|---|
| | Yes | No |
| Feeling good | 83% (n=19) | 17% (n=4) |
| Feeling angry | 91% (n=21) | 9% (n=2) |
| Feeling down | 96% (n=22) | 4% (n=1) |
| Feeling uptight | 87% (n=20) | 13% (n=3) |
| Social setting expectations | 87% (n=20) | 13% (n=3) |
| Stop doing things that help keep me sober | 91% (n=21) | 9% (n=2) |
| Relationship with spouse/partner | 83% (n=19) | 17% (n=4) |
| Relationship with other family members | 89% (n=16) | 11% (n=2) |
| Relationship with people outside the family | 94% (n=17) | 6% (n=1) |
| Feeling signs of withdrawal | 78% (n=18) | 22% (n=5) |
| Physical urges/cravings | 83% (n=19) | 17% (n=4) |
| Psychological urges/cravings | 91% (n=21) | 9% (n=2) |
| Using other drugs | 68% (n=15) | 32% (n=7) |

Relapse, however, is a complex process and systems issues affect it as well. A number of people in treatment find themselves in other systems where help is not available as this exchange from an interview points out:

> "I had spent some time in jail and got out and was just the feeling of wanting to get high was just overwhelming. I: And why do you think those feelings were there, what do you think was causing those feelings? C: Well because you know the 6 months I was in jail there was, they don't help you at all with any kind of treatment, any meetings or anything so, it was like I just went sort of down after being alright for awhile."

This point will be discussed further in Chapter 7 on criminal justice involvement and the need for treatment services and recovery supports to be available in the SEMCA region.

Support from program, family, friends, others is a key factor in promoting successful recovery. Treatment clients were asked to say **how much support they were receiving in their recovery** from a range of individuals and groups.

Table 5.19 Perceived Support for Recovery

| | M | 1 No Support | 2 | 3 | 4 | 5 | 6 | 7 Full support |
|---|---|---|---|---|---|---|---|---|
| Family Support | 6.2 | 10% | 0% | 0% | 0% | 4% | 10% | 76% |
| Peers in Treatment | 5.9 | 0% | 3.5 % | 3.5 % | 10% | 10% | 28% | 45% |
| Friends and Neighbors | 3.8 | 36% | 7% | 3.5 % | 11% | 11% | 3.5 % | 28% |
| Larger Community | 4 | 32% | 0% | 4% | 14% | 21% | 11% | 18% |

The information in table 5.19 underscores that, while clients feel supported by those closest to them, when they look to neighbors and the community, support is lacking. This is important to know because those in recovery return to live in communities and need to find a welcoming environment if their success is to be promoted.

Clients were then asked about the type of **treatment support they receive from outside the treatment** provider. As the table above demonstrates, support varies greatly, with the highest scores given to family, and the lowest scores to friends and neighbors. Clients provided several examples of how family support is shown. This includes being encouraging (9), helping with appointments and transportation (8), and visiting and sending gifts and money while they are in treatment (8). For instance one person with good family support says:

> "They are totally behind me and as much as I've done them wrong, and they always still do everything, they come visit me, they send my cigarettes, they send money, … they do everything in their power that they can and I've done a lot of wrong things to them so, they are very behind me."

Examples of peer support included being encouraged and receiving empathy from peers while in treatment. A small number (6) feel that support has been mixed, with people not offering genuine support and their own feelings of not being comfortable in treatment. Examples of support from friends and neighbors were instructive about the barriers those in recovery face. Many talked about the fact that they only have friends who are in treatment or still using and that these people are not supportive and "don't want me to get better". One client pointed out "*there is not too many*

*friends left that I consider friends, their associates, you know, they're all just drug users."* A few people point out that no one knows that they are in treatment and others say friends do not know what to do to help, so they cannot provide support. Clients had few examples of community support. The main support referred to was the AA/NA groups they attend and the sponsors that work with them. Two were somewhat cynical by noting that support is offered "to get users off the street from the community."

When asked to rate their treatment program in helping to meet recovery goals, a preponderance of those interviewed (83%) believe the programs they are participating in were very to extremely helpful in meeting their recovery goals; 14% thought programs were somewhat helpful and 3% said they were not or only a little helpful.

Clients were also asked "Do you know **where to get support services you need** to be successful in recovery?" Of the 29 respondents, 86% said yes, while 14% said no. When asked to provide examples about support services, most (11) mentioned Alcoholics Anonymous and Narcotics Anonymous meetings. Other responses included service agencies such as SEMCA, Michigan Works, the Guidance Center, Community Care Services and local hospitals. A few mentioned individuals such as family members, sponsors and parole officers. When given a **list of support services they might utilize**, the following table summarizes the responses.

Table 5.20 Likelihood of Utilization of Support Services (n=29)

| | Yes | No |
|---|---|---|
| Religious organizations | 75% (n=21) | 25% (n=7) |
| Social service agencies (e.g. MiWorks) | 97% (n=32) | 3% (n=1) |
| Courts | 38% (n=11) | 62% (n=18) |
| Colleges/Universities | 93% (n=27) | 7% (n=2) |
| Employment agencies | 83% (n=24) | 17% (n=5) |
| Employee assistant programs | 69% (n=20) | 31% (n=9) |
| Health care organizations | 97% (n=28) | 3% (n=1) |
| Volunteer organizations | 93% (n=27) | 7% (n=2) |
| Other | Internet = 3% (n=1) | |

Respondents were also asked to describe **what can be done in the community to support recovery.** Responses ranged from concrete resources to ideas about addressing treatment and prevention. One of the top responses (6) was to work to change attitudes and beliefs about those who use to reduce the stigma and barriers they face. The other top response (6) was to conduct additional advertising to let people know about support services that are available. Next clients noted the need for more NA and AA meetings and better access and transportation to those places where help is available. Many single responses were

provided including getting "drug dealers off the street", finding employment for people in recovery, funding Suboxone treatment and using Medicaid funds to support people in recovery.

## Provider Perspectives on Recovery

Executive directors of SEMCA-funded treatment programs, their staff, and the staff of funded prevention programs were asked about service-provider models, such as Recovery Orientation and the Recovery Oriented Systems of Care (ROSC). We asked their perceptions about ROSC ideals or understanding (for treatment) and preparedness for ROSC (prevention). Below are two tables that summarize the responses to those ideas. For treatment providers, the question was phrased as: How prepared do you feel your agency is to engage in the following efforts to support recovery? The response scale ranged from 1= not prepared to 7 = very prepared.

### Table 5.21 Treatment Providers' on Recovery Orientation Preparedness

| | Treatment Staff | | Directors | |
|---|---|---|---|---|
| | N | Mean | N | Mean |
| Outreach, pre-treatment supports and engagement | 102 | 4.7 | 23 | 5.4 |
| Providing a more diverse menu of services and supports | 102 | 5.0 | 23 | 3.17 |
| Making more assertive efforts to connect individuals to families for support | 101 | 5.1 | 23 | 5.5 |
| Expanding availability of non-clinical/peer-based recovery supports | 101 | 4.8 | 23 | 5.0 |
| The consistent implementation of post-treatment recovery check-ups | 101 | 4.4 | 23 | 5.0 |
| The switch from an expert-patient model to a partnership-consultant approach | 100 | 4.5 | 23 | 5.1 |

Treatment staff feels somewhat less prepared than executive directors on five out of six items. With respect to providing a more diverse menu of services, staff feels well prepared to assist clients, while Directors, perhaps with an eye to the cost of training and staffing needs, feel much less prepared. Treatment staff feel the least prepared to provide consistent implementation of post-treatment recovery check-ups. Overall these moderately positive results speak well about the potential for treatment facilities to take on a broader role in recovery services.

The ROSC model is somewhat newer to prevention providers, so the survey asked respondents their opinions about steps they may have taken to prepare for ROSC. Table 5.22 shows that, while many agree that they are prepared, there is a level of ambivalence as well. In the positive direction, they express an

understanding of the ROSC model, see that prevention fits the model well, and are working toward practice alignment. On the other hand, fewer organizations have developed interagency agreements, provided trainings on ROSC and a third believe significant changes will be needed before participation in ROSC.

Table 5.22 Prevention Providers' Preparation for ROSC (N=30)

| Recovery-Oriented Systems of Care | Yes | No |
|---|---|---|
| My organization understands how the ROSC model will affect prevention | 83% | 17% |
| My organization has changed programs and/or processes to reflect ROSC principles | 61% | 39% |
| Significant changes will need to be made for my organization to participate in a ROSC | 37% | 63% |
| My organization has participated in regional ROSC transformation workshops | 67% | 33% |
| My organization has provided training on the ROSC model | 21% | 79% |
| My organization has developed interagency agreements with other organizations that support recovery and promote wellness | 52% | 48% |
| My organization is working toward practice alignment in a ROSC model | 75% | 25% |
| Prevention programs fit well with the ROSC model | 74% | 26% |

Prevention staff was also asked a second question related to their readiness for ROSC, to provide a sample of the type of activities that might be expected in moving toward a ROSC. Table 5.23 demonstrates that agencies also report moderate to high levels of readiness for nearly all components mentioned including: providing programming in schools, programs for family education, raising community awareness, with, slightly lower readiness for social marketing, early intervention, and lowest for public advocacy.

Table 5.23 Level of Readiness to Participate ROSC Components

| | M | 1- None | 2- Low | 3 –Mode-rate | 4- High |
|---|---|---|---|---|---|
| Do more community outreach about program services. | 3.3 | 0% | 10% | 48.5% | 41.5% |
| Reduce stigma and discrimination regarding substance use in the community | 3.6 | 4% | 4% | 40% | 52% |
| Participate in public policy advocacy on behalf of clients | 2.6 | 11% | 21% | 43% | 25% |

| | M | 1- None | 2- Low | 3 –Mode-rate | 4- High |
|---|---|---|---|---|---|
| Provide programming for family education and strengthening | 3.4 | 0% | 14% | 31% | 55% |
| Provide programming to promote awareness in schools | 3.6 | 3.5% | 3.5% | 24% | 69% |
| Provide programming to promote awareness in communities | 3.5 | 0% | 7% | 34% | 59% |
| Provide programming for early intervention | 3.2 | 7% | 10% | 38% | 45% |
| Provide social marketing campaigns for substance use prevention | 3.1 | 7% | 10% | 45% | 38% |

## Summary and Recommendations

SEMCA treatment and prevention services are offered by a variety of providers. Client demographics point to a need for more outreach and specialized services targeted toward women, who are under-represented in treatment admissions. The rest of the general profile of treatment clients shows them to be lacking in three related areas: education, employment and income. SEMCA would do well to work with its provider network and collaborate with other agencies to offer GED classes, support adult education and promote job skills and job opportunities for those leaving treatment. While use of drugs among those over 55 may be increasing, only 3% of SEMCA clients are over 55. This may mean that fewer resources are needed for specialty programs. It may also indicate that very different treatment strategies are needed to engage older clients who are seemingly not accessing this system. Perhaps community-based care, or care coordinated with older-adult living facilities may be more appropriate.

Data on treatment availability shows that there is a perceived need for additional treatment facilities. Treatment availability has been fairly steady, but did drop off in the last year when data was collected for this assessment. The need for treatment is not declining, particularly in the face of growing prescription-drug misuse. Some clients continue to be placed on wait lists for treatment, although this measure improved over time. There are still many clients who wait, especially for residential care. While it is the most expensive type of care, if wait lists continue for this service, adjustments should be made in funding to provide additional slots.

The SEMCA call center, which serves as the main treatment access point has seen a steady, high number of calls. This is in contrast to drop-off in treatment admissions. Perhaps part of the disconnect between calls to the access center and admissions is because of a lack of readiness on the part of clients, or the lack of availability of treatment that would-be clients perceive as suitable. From maps of treatment services and clients' residences, we see that the geographic dispersion of treatment locations is not optimal. For this

reason we recommend that SEMCA find new providers and work with current providers to expand treatment locations to those underserved areas, particularly in the southern area of Wayne County. Finally adult clients report that accessing treatment most often happened when they reach a low point, youth clients however, must be caught or face some consequence before they will stop substance use, and parents acknowledge that they had little awareness that their child was in trouble. This lack of understanding among parents, points to the need for prevention efforts to raise awareness of the signs of drug use among parents, schools and community members.

Data on treatment episodes shows that there is some room for improvement in treatment. Almost one-fifth leave treatment in less than one week and 40% leave against staff advice. SEMCA may want to increase oversight of treatment programs, to ensure that appropriate methods of engagement are being used. These numbers may also point to the need for training on engagement treatment staff, and additional support for case management services and referrals to meet the needs of clients, which may encourage them to remain in treatment.

Both adult and youth clients had mixed feelings about their latest experience in treatment. The comments by both adults and youth are few in number, and nearly all youth were mandated to treatment. Despite the small sample and mandated treatment, these comments provide insights that could allow for changes to funded programs. For adults, the troubles described in the residential treatment environment deserve attention. Perhaps program oversight mechanisms should be increased to deal with such lapses in program quality. This may also be a place where a practice community of providers could be convened to assist with program issues and oversight that would allow providers the opportunity to discuss issues and problem-solve with colleagues. Youth programming may require more thought about best practices and new methods. For instance, is there evidence that adult AA groups are suitable for and effective for youth? We recommend SEMCA encourage funders to pay attention to this issue and offer more specialized treatment services for teens.

With respect to treatment quality and effectiveness, the data is mainly positive. Providers and key informants see quality of care as fair to good, while those who work with older adults in nursing homes see it as poor, due to the lack of treatment. Clients have a better perception of quality than providers. Nearly all respondents are very positive about their views of treatment effectiveness. As with quality, clients in treatment have higher perceptions of treatment effectiveness than do other stakeholder groups. This is information that should be shared with communities, schools and others in the SEMCA region to highlight a positive message about treatment.

Key informants identified treatment needs as unmet for youth and senior citizens. This fits with conventional wisdom about service needs; however data shows few seniors participate in those specialty programs funded for treatment. SEMA may want to explore better options for reaching and treating senior citizens to ensure that that population is adequately served. Survey data also notes providers feel that

clients, and families and children of clients, need more support groups to help with the treatment and recovery process. SEMCA could use its funding opportunities to add providers able to conduct support, and/or provide technical assistance to those conducting groups, to allow them to expand. At the individual level, clients point to need for follow-up care and employment and job skills. As noted above, these are areas of identified need for which SEMCA could serve as a catalyst for action.

In the survey, providers rate treatment availability low on the list of barriers. This contradicts what we heard from key informants, who do see availability as an issue. The problem may lie in providers' lack of understanding about where treatment is located. Providers and especially directors see funding as a barrier to providing treatment services. Lack of access to health care and insurance was viewed as a barrier by most of our respondents. Additional advertising about the availability, location and accessibility of SEMCA treatment services would benefit multiple populations.

Participants in the data collection see community support and physical resources as major barriers to prevention. In response to this, and other data which speaks to the importance of community support, SEMCA may want to do more to engage in environmental change strategies to share the message that prevention (and treatment) work. Prevention providers' responses to the items on ROSC readiness point to the need for additional training, indicating they may not be ready for conducting broader prevention efforts for things such as wellness or other community- oriented themes. The use of social media is critical and a capacity for advocacy is important for prevention and recovery. Prevention experts are being asked to expand their scope of service beyond traditional, youth-focused programming, and to take part in recovery support as well. This work will require new skills and training opportunities.

Clients in recovery need a broad set of resources to tap into for support. On a positive note, clients seem to gather support from their treatment programs and family members. However, SEMCA may need to take a role in encouraging greater community acceptance and support, such as advocating for more alcohol-free events and peer-support opportunities to bolster the chance for success in recovery.

The SEMCA provider network, like most others in the state, has some ambivalence about ROSC and its implementation. While many are prepared for some aspects, there is much more work to be done. The path to recovery is multi-faceted and requires system changes, as well as individual work. Clients' focus attention and concern on their post-treatment life. Given the importance of this phase, we recommend SEMCA offer some standards or a fidelity check-list for post-treatment follow-up care. This would help providers focus more time, attention and resources on this phase and offer suggestions for protocols that will support recovery success. In terms of ROSC improvements for providers, there are still needs to meet. SEMCA could offer more training to providers on ROSC implementation, clear materials on expectations, and more tactical efforts such as how to increase collaboration with other providers and the mechanics of writing memos of understanding to facilitate collaboration.

# Chapter 6: Co-Occurring Disorders

## Introduction

The co-occurrence of substance use and mental health disorders has been a topic of interest since the late 1970s when practitioners began noting the high rate of these co-occurring disorders (COD). Over the past several decades, awareness of COD has grown and it has become "an expectation not an exception" in treatment settings (Minkoff & Cline, 2004). The most recent National Survey on Drug Use and Health (SAMHSA, 2010) provides national prevalence estimates of past year mental illness (AMI), serious mental illness (SMI) and co-occurrence of substance use disorders (SUD) with both levels of mental illness. AMI is defined as having a diagnosable mental, behavioral, or emotional disorder (excluding developmental and substance use disorders) that meets DSM-IV diagnostic criteria. SMI is defined as a mental disorder that meets AMI criteria and additionally has resulted in serious functional impairment, which substantially interferes with or limits one or more major life activities.

In 2010, among the 20.3 million adults with a past-year SUD, 45.1% (9.2 million) had a co-occurring mental illness, in comparison to 17.6% of adults without an SUD who had a mental illness. More specifically, among those 20.3 million adults with a past year SUD, 14.2% (2.9 million) had SMI. The rate of illicit drug use in the past year was higher among adults with past year AMI, (25.8%) than it was among adults who did not have mental illness in the past year (12.1%). Demographically, national prevalence rates show COD is highest among 18 to 25 year olds, males, American Indian or Alaska Natives, individuals who are unemployed, individuals who are 100% below the federal poverty level, and individuals who are insured by Medicaid (Table 6.1).

Table 6.1 Percentage of Adults with COD among Demographic Categories

| | SUD and AMI | SUD and SMI |
|---|---|---|
| Age | | |
| 18-25 | 9.60% | 2.90% |
| 26-49 | 4.70% | 1.50% |
| 50+ | 1.30% | 0.40% |
| Gender | | |
| Male | 4.50% | 1.20% |
| Female | 3.50% | 1.30% |
| Race/Ethnicity | | |
| Asian | 1.80% | 0.30% |

| | SUD and AMI | SUD and SMI |
|---|---|---|
| Native Hawaiian or Other Pacific Islander | 2.30% | 0.30% |
| White | 4.00% | 1.30% |
| Black | 4.20% | 1.30% |
| Hispanic | 4.30% | 1.10% |
| Two or more races | 5.80% | 2.30% |
| American Indian or Alaska Native | 7.70% | 4.10% |
| Employment | | |
| Unemployed | 8.20% | 2.50% |
| Full-Time | 3.30% | 0.90% |
| Part-time | 5.40% | 1.80% |
| Poverty level | | |
| Below 100% FPL | 6.7% (2 million) | 2.5% (742,000) |
| 100-199% FPL | 4.70% | 1.30% |
| At or above 200% FPL | 3.20% | 1.00% |
| Insurance Type | | |
| Medicaid or Children's Health Insurance Program | 6.70% | 2.80% |
| No health insurance | 6.60% | 1.90% |
| Private | 3.00% | 0.90% |
| Other (including Medicare) | 2.50% | 0.90% |

*Source*: 2010 NSDUH

The presence of COD has unique and often more severe consequences than a single disorder. Individuals with COD are at higher risk of suicide, homelessness, psychiatric hospitalizations, HIV infection, hepatitis C, job interference, violence, abuse, and poverty; higher costs to health care systems; and lower rates of treatment and medication adherence when compared with individuals with only one disorder (Dickey, Normand, Weiss, Drake & Azeni, 2002; Elbogen, Swanson, Swartz & Van Dorn, 2005; Mueser, Drake & Wallach, 1998; SAMHSA, 2002). Frequently, individuals with COD are difficult to engage and often cycle in and out of various systems; therefore, treatment of this population has critical implications for providers in substance abuse and mental health treatment settings.

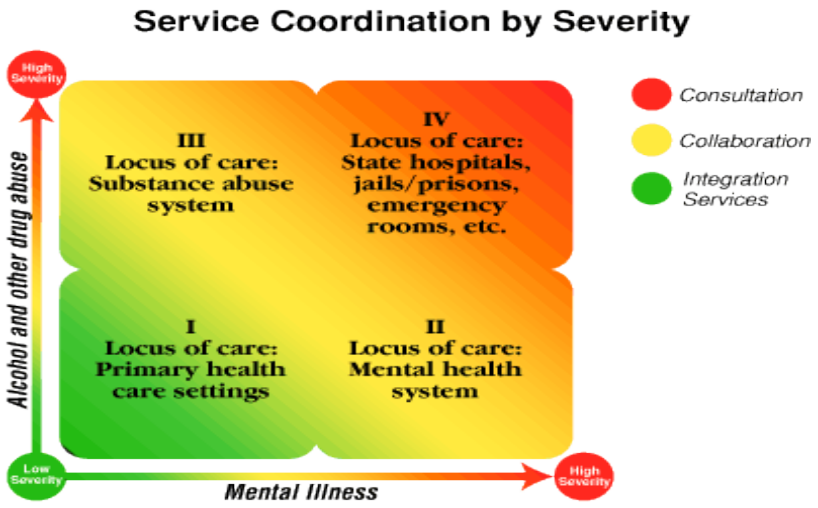
NSDUH reports that among the 9.2 million adults who had past-year AMI and SUD, 44.4% received substance use and/or mental health treatment in the past year. This includes 7.7% who received both mental health care and substance use treatment, 33.6% who received only mental health care, and 3.1% who received only substance use treatment. This leaves 55.6% of individuals with AMI and SUD who received no treatment. Treatment rates among the 2.9 million adults in 2010 with SMI and SUD were higher, with 64.0% receiving substance use and/or mental health care in the past year. Included in the 64.0% are 14.5%

who received both treatments, 45.0% who received mental health care only, and 4.3% who received substance use treatment only. Among individuals with SMI and SUD, 36.0% received no treatment.

Best practice standard for individuals with COD is an integrated approach, in which mental health and substance abuse treatments are administered through one provider (Drake et al., 2001; Mueser, Noordsy, Drake & Fox, 2003). More than a specific intervention technique, integrated treatment is a "rubric for sensible structural arrangements to ensure access" (Drake, Morrissey & Mueser, 2006, p. 430) for services to those experiencing both types of disorders. Many state and local mental health and substance abuse treatment organizations are moving toward integration through mechanisms such as interagency relationships and agreements that vary in their intensity and formality (Kubiak, Zeoli, Hanna, & Essenmacher, 2011). This is of particular concern to communities interested in improving integration of service to more effectively treat individuals with COD (Kubiak et al., 2011).

The four-quadrant conceptual framework has become a familiar figure to many, since it was adopted by the National Association of State Mental Health Program Directors (NASMHPD) and the National Association of State Alcohol and Drug Abuse Directors (NASADAD) in 1998 (Figure 6.1). The matrix depicts a continuum of disorder severity, from low to high, and corresponding systems of care. *Severity* refers to symptom multiplicity, severity, and acuteness, rather than diagnosis (SAMHSA, 2002). It is not intended to classify individuals, but rather to help conceptualize individuals' treatment and to guide systems integration and resource allocation in treating individuals with COD (NASMHPD/NASADAD, 1998). The framework shows that the substance abuse treatment system is likely to be the system of care for individuals with lower severity of mental illness and higher severity of substance use (Quadrant III). This matrix can be conceptualized further by relating it to the levels of treatment described in the American Society of Addiction Medicine's Patient Placement Criteria (ASAM PPC-2R): Addiction Only Services (AOS), Dual Diagnosis Capable (DDC), and Dual Diagnosis Enhanced (DDE). The Dual Diagnosis Capability in Addiction Treatment (DDCAT) index was later created to guide programs and systems in assessing the dual-diagnosis capacity of substance abuse treatment services, such as AOS, DDC, and DDE, and developing them accordingly.

Figure 6.1 Four Quadrant Conceptual Framework




*Source*: SAMHSA Report to Congress on the Prevention and Treatment of Co-occurring Substance Abuse Disorders and Mental Disorders, 2002

In this chapter we use primary and secondary data to examine perceptions, prevalence, and treatment of co-occurring disorders in the SEMCA region. Primary data is comprised of online survey responses from executive directors, treatment staff and prevention staff as well as face-to-face interviews with individuals with COD and receiving treatment in the SEMCA system. Secondary data was provided by SEMCA through the Care Net administrative database. First we provide an overview of the issue of COD in the SEMCA region and its service capacity. Next we look at the issues of identification of COD, access to the system, and treatment experiences. Finally we present a summary of Care Net data, providing a comparison of individuals with COD and individuals with SUD alone.

## Section 6.1 Problem Definition

### COD Among SEMCA Clients

Analysis of Care Net data from FY '08 through FY '10 revealed a total of 9,106 individuals with 17,774 admissions. Of those individuals, 8,850 had valid diagnosis data to assess for the presence of co-occurring mental health diagnoses. Just over half (51.0%) had a mental health diagnosis, which mirrors the national data cited earlier. Among those with a mental health diagnosis, nearly half (46.9%) had a diagnosis indicative of a serious mental illness (SMI), which included diagnoses of schizophrenia-related disorders, bipolar disorder, and major depressive disorder. Depressive disorder NOS appeared in 23.0% of those with COD, and 30.0% had 'other' mental health diagnoses (including adjustment disorder, anxiety disorder, attention deficit hyperactivity disorder, conduct disorder, disruptive disorder, dysthymic disorder, obsessive compulsive

Nearly 25% of all SEMCA clients have a serious mental health problem.

disorder, oppositional defiant disorder, panic disorder, phobic disorders, and post-traumatic stress disorder).

## System Description

*Licensed providers of substance abuse and mental health services.* Executive directors and staff of treatment and prevention providers were asked to respond to online surveys (see Appendix A for description of methods). Table 6.2 below summarizes respondents' agencies in terms of licensure for substance abuse treatment services, substance abuse prevention services, and mental health services. Of the 31 executive director respondents, 97% reported that their agencies are licensed providers of substance abuse treatment, 53% reported that their agencies are licensed providers of substance abuse prevention, and 57% reported that their agencies are licensed providers of mental health services. Treatment staff (n=122) were more representative of prevention and/or mental health providers, with 89% reporting that their agencies are licensed providers of substance abuse treatment, 64% reporting that their agencies are licensed providers of substance abuse prevention, and 62% reporting that their agencies are licensed providers of mental health services. Among prevention providers (n=31), 58% responded that their agencies are licensed providers of substance abuse treatment, 97% responded that their agencies are licensed providers of substance abuse prevention services, and 64% responded that their agencies are licensed providers of mental health services.

Table 6.2 Respondents Reporting Agency Licensure for SUD Treatment, Prevention, and Mental Health Services

| Agency licensure | Executive Directors | Treatment Staff | Prevention Providers |
|---|---|---|---|
| SA Treatment | 97% | 89% | 58% |
| SA Prevention | 53% | 64% | 97% |
| MH Treatment | 57% | 62% | 64% |

*Practices and Policies.* The Dual Diagnosis Capability in Addiction Treatment (DDCAT) Index is a fidelity instrument for measuring addiction treatment services, in a substance abuse treatment setting, for people with COD. It is based on the American Society of Addiction Medicine (ASAM) taxonomy of a program's level of dual diagnosis capability and evaluates 35 elements in 7 domains. Using criteria from DDCAT item IIA ("Routine expectation of and welcome to treatment for both disorders"), survey respondents were asked "When a client presents with a co-occurring mental health need, which of the following practice(s)/policies is used by your agency?" On the DDCAT, responses are indicators of an agency being classified at one of five levels: Addiction Only Services (AOS), Dual Diagnosis Capable (DDC), Dual Diagnosis Enhanced (DDE) or at intermediary levels between the aforementioned classifications (AOS/DDC or DDC/DDE). Responses of executive directors and treatment staff were similar, with 5-7% of respondents categorizing their agencies as AOS or AOS/DDC, 13-14% as DDC or DDC/DDE, and 60-63% as DDE (See Table 6.3 below).

Table 6.3 "When a client presents with a co-occurring mental health need, which of the following practice(s)/policies is used by your agency?"

| Level of Services | Criteria | Executive Directors (n=22) | Treatment Staff (n=107) |
|---|---|---|---|
| AOS | The program focuses on individuals with substance- related disorders only and does not provide treatment to individuals who present with any type of mental health problem. | 0% (n=0) | 4% (n=4) |
| AOS/DDC | The program generally expects to treat only individuals with substance-related disorders, but does not strictly enforce the refusal/deflection of persons with mental health problems. The acceptance of mental health disorders likely varies according to the individual clinician's competency or preferences. | 5% (n=1) | 3% (n=3) |
| DDC | The program tends to primarily focus on individuals with substance-related disorders, but routinely expects and accepts persons with mild or stable forms of co-occurring mental disorders. | 18% (n=4) | 20% (n=21) |
| DDC/DDE | The program expects and treats individuals with CODs, regardless of severity, but this program has evolved to this level informally. | 14% (n=3) | 13% (n=14) |
| DDE | The program routinely accepts individuals with CODs regardless of severity and has formally mandated this aspect of its service array through its mission statement, philosophy, welcoming policy, and appropriate protocols. | 63% (n=14) | 60% (n=65) |

*Cross-training of staff.* When asked "What portion of your staff is cross-trained in treatment for COD?" half (n=11) of executive directors who responded to this item reported that all of their staff are cross-trained. Ten responded that between 50% and 95% of staff were cross-trained, while one responded that 20% of staff was cross-trained. Treatment staff elaborated by reporting types of COD training they received, with 95 individuals reporting some type of COD training. Seminars, workshops, conferences, and trainings were reported as the most common method of learning about COD (n=30). College coursework was cited next most frequently (n=28). Fifteen individuals reported that they received training for certification e.g., CAAC or CAADC, and 13 individuals reported on-the-job experience as a source of COD training. Twelve individuals reported taking continuing education classes on COD. Some individuals reported being trained on specific models or skills such as IDDT (n=10), motivational interviewing (n=4), or the DSM-IV (n=4). Also reported as sources of COD training were online trainings (n=5) and internships (n=5). Table 6.4 below provides a summary.

Table 6.4 "What type of training have you had for co-occurring disorders?"

| Type of Training | N=122* |
|---|---|
| Seminars, workshops, conferences, and trainings | 25% (n=30) |
| College coursework | 24% (n=29) |
| Certification | 12% (n=15) |
| On-the-job experience | 11% (n=13) |
| Continuing education | 9.8% (n=12) |
| IDDT | 8.2% (n=10) |
| Online training | 4% (n=5) |
| Motivational Interviewing | 3% (n=4) |
| DSM-IV | 3% (n=4) |

*There were a total of 95 respondents, of these 95 respondents approximately 78% indicated more than one type of training from the table above; making the total responses N=122.

*Services Provided.* In regards to services provided at their agency for individuals with COD, all executive directors who responded to this item (n=22) reported that their agencies provided some type of service for individuals with COD: 95% of their agencies provide individual therapy, 86% group therapy, 67% case management, 50% family therapy, 32% residential treatment, 14% detox, and 9% IOP. Other types of services, mentioned by one respondent each, were Assertive Community Treatment (ACT), women's specialty services, transition to independence services, and recovery support services.

Service categories were reported by treatment providers (n=105) in the same order of frequency as they were reported by executive directors, but at lower rates, with 71% providing individual therapy, 65% group therapy, 57% case management, 50% family therapy, 31% residential treatment, and 17% detox. 19% reported providing 'other' services, such as intake/screening/assessment to refer out (9%) and psychiatric services (3%). Unlike executive directors, 9% of treatment staff reported that they did not provide any special COD services.

## Section 6.2 Problem Identification and Treatment

Accurate identification of COD is the first step to appropriate treatment. In order to better understand the trajectory of individuals with COD in SEMCA's treatment system, we examined three years (FY '08, FY '09, FY '10) of Care Net data for possible points of COD identification at three stages of contact within the system: **initial contact** (based on the Screening and SARF Forms), **admission** (based on the Admission Form), and **discharge** (based on the Discharge Form). Variables examined were 'suicidal thoughts' and 'homicidal thoughts' on the Screening Form and 'indication of mental health issues' on the SARF, Admission, and Discharge forms.

Ideally, individuals would be identified consistently as having mental health issues or as not having mental health issues at all three points of contact (See Figure 6.2: Group 2 and Group 7). Another ideal pattern would be those whose mental health issues were not identified at initial contact, but were identified at

admission and discharge (Group 6). Those with an acceptable pattern of identification were shown to have mental health issues at the first two stages, but not the third (Group 1), at the first stage only (Group 3), or at the second stage only (Group 5).The least ideal patterns would be those who were identified at initial contact, not at admission, but identified again at discharge (Group 4) and those who weren't identified at the first two points but were identified at discharge (Group 8).

Figure 6.2 depicts the following discussion regarding identification of mental health issues at initial contact, admission, and discharge. Of the 9,106 individuals in the Care Net database between FY '08 and FY '10, 173 were missing either a screening form or SARF, leaving a total of 8,933 cases to examine.

Of these 8,933 individuals, 36.3% (3,242) were identified at **initial contact** as having mental health issues, and 63.7% (5,691) were not identified as having mental health issues. This rate of identification is 8.8% lower than the national prevalence rate of 45.1% of individuals with past-year SUD and AMI.

However, the next point in time, **admission**, can be considered a 'safety net' to accurately confirm the presence of mental health issues among those identified at initial contact and to formally assess mental health issues among those who were not identified at initial contact. Of the 3,242 initially identified as having mental health issues, 71.3% (2,310) were verified at admission, while 28.7% (932) were identified at admission as not having mental health issues. Of the 5,691 initially not identified, 34.6% (1,968) were in fact identified at admission, while 65.4% (3,723) were again identified at admission as not having mental health issues. In other words, the proportion of individuals identified as having mental health issues increased from 36.3% (3,242) at initial contact to 47.9% (4,278) at admission. This is slightly higher than the expected rate, based on national prevalence.

By the third and final point in time, **discharge**, the patterns of 'yes' (e.g., mental health issues were identified) and 'no' (e.g., mental health issues not identified) over the three points of contact formed eight groups. Of the 2,310 who were identified at the two prior points in time as having mental health issues, 82.2% (1,898) were again identified the same (Group 2), while 17.8% (412) were identified as not having mental health issues (Group 1). Of the 932 who were identified at initial contact but not at admission, 66.1% (616) were verified at discharge as not having mental health issues, but 33.9% (316) were identified again at discharge as having mental health issues (Group 4). Looking at those who were not identified at initial contact but were identified at admission, 74.4% (1,464) were confirmed at discharge as having mental health issues (Group 6), while 25.6% (504) were again identified as not having mental health issues (Group 5). Finally, among those who were not identified at the first two points in time, 80.2% (2,984) were consistently identified as not having mental health issues at discharge (Group 7). On the other hand, 19.8% (739) who had not been identified at either prior point were identified as having mental health issues at discharge (Group 8). Overall, the number of individuals identified with mental health issues increased from 3,242 at initial contact to 4,417 (49.4%) at discharge.

It is encouraging that identification of COD increased over time as individuals moved through the system. Six of the eight final groups illustrated a theoretically appropriate pattern of identification i.e., they were consistently identified as not having COD or they were identified with COD at some point early enough to presumably include it in their treatment plan. *Groups 4 and 8, i.e. those with a Yes-No-Yes pattern and No-No-Yes pattern are perhaps the most important to further examine, because they were identified at discharge as having mental health issues but not at admission, meaning that their treatment most likely would not have included attention to those issues.* They comprise 11.8% (n=1,055) of the total service population. To further examine the situation with these cases, we looked at the diagnoses and providers of these two groups (Tables 6.5 and 6.6). We found that, although they were identified at discharge as having mental health issues, the majority (61.3%) did not have documented mental health diagnoses. This was more prominent for those who were not identified with COD at either of the first two points in time (Group 8). *Most notable is that 30.2% of those identified at initial contact and discharge but not admission had a documented SMI diagnosis.* The top five providers for individuals in Group 4 or Group 8 were Hegira, Community Care Services (CCS), The Guidance Center (TGC), Wolverine Human Services, and Catholic Charities of Monroe. In looking at their overall ranking i.e., their ranking in regards to total number of clients served, we see that Hegira is ranks first, CCS is fourth, and TGC is second. In addition, Hegira and CCS both have DDCAT scores over 4 (4.6 and 4.1 respectively) on the DWCCMH review, with slightly lower scores on the SEMCA DDCAT review (3.7 each). Wolverine is 17th in terms of total clients served, but has a DDCAT score of 3.9 on the DWCCMH review and no score on the SEMCA review. All of these providers are situated in both the mental health and substance abuse treatment systems and their staff have been cross trained in both systems, as well as integrated care.

It is difficult to know if the lack of identification of mental health issues at any point in time is a data entry concern or the actual absence of important information for use in treatment planning. In addition, upon admission to agencies that have a high DDCAT rating, such as Hegira, it may be understood that all clients entering have a COD and that integrated treatment is standard practice. It is also possible that those who had mental health symptoms at screening and admission lacked such symptoms at discharge, suggesting that the symptoms were attributable to drug or alcohol use. However, the examination of the data through the course of treatment allows us to assess the likelihood of continuity of care for COD through consistent identification. It is impressive that nearly 90% of cases show evidence of consistent assessment outcomes, suggesting that the need for integrated treatment was recognized.

Figure 6.2 Process Mapping of Mental Health Issues in Substance Abuse Clients

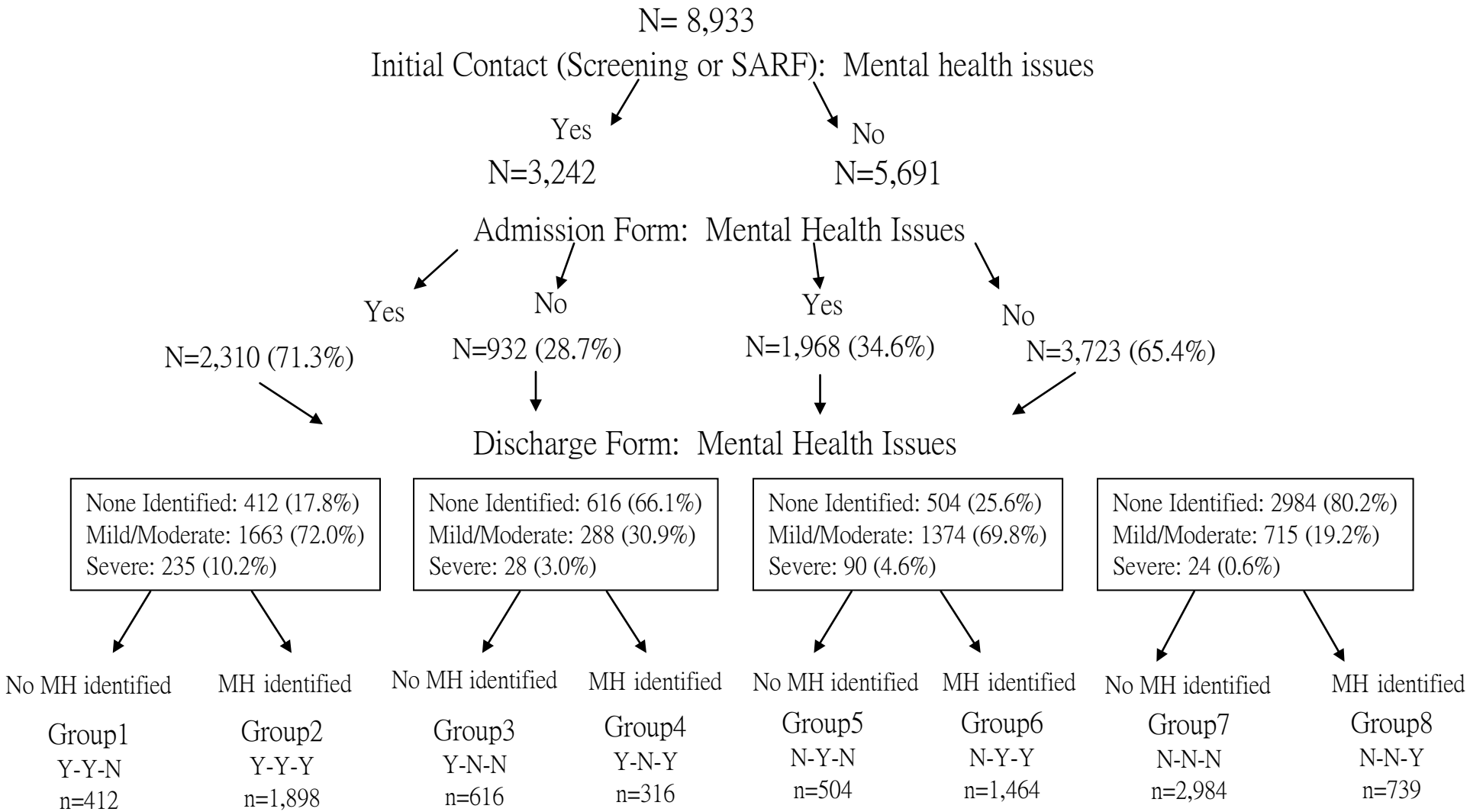


Table 6.5 Mental Health Diagnosis Categories of Group 4 and Group 8

| MH Diagnosis | | | |
|---|---|---|---|
| | Group 4 | Group 8 | Total |
| SMI | 93 (30.2%) | 42 (6.0%) | 135 (13.4%) |
| Depression NOS | 45 (14.6%) | 60 (8.6%) | 105 (10.4%) |
| Other MI | 53 (17.2%) | 96 (13.8%) | 149 (14.8%) |
| None | 117 (38%) | 499 (71.6%) | 616 (61.3%) |
| Total | 308 | 697 | 1005 |

**Note*: Missing = 50

Table 6.6 Provider of First Admission for Group 4 and Group 8

| Agency | | | | | |
|---|---|---|---|---|---|
| | Agency's Overall Ranking* | DDCAT score** | Group 4 | Group 8 | Total |
| Hegira Programs, Inc. (CAN) | 1 | *4.6*/3.7 | 68 (21.5) | 147 (19.9) | 215 |
| Comm. Care Serv. (TAY) | 4 | *4.1*/3.7 | 12 (3.8) | 77 (10.4) | 89 |
| Guidance Center, The (ALLEN) | 2 | 4.0 | 22 (7) | 63 (8.5) | 85 |
| Wolverine Human Services | 17 | 3.9 | 11 (3.5) | 68 (9.2) | 79 |
| Catholic Charities of Monroe, Inc (CSS MON) | 8 | 3.2 | 33 (10.4) | 45 (6.1) | 78 |
| Redford Counseling (RF) | 11 | *3.2*/3.1 | 25 (7.9) | 42 (5.7) | 67 |
| Beginning Step | 14 | 3.1 | 25 (7.9) | 33 (4.5) | 58 |
| NARDIN (DET) | 19 | 2.0 | 9 (2.9) | 35 (4.7) | 44 |
| Eastwood (DB) Auto Club Drive | 5 | *4.2*/3.4 | 15 (4.8) | 24 (3.3) | 39 |
| Personal Nursing Lighthouse (PLY) | 9 | *3.5*/3.5 | 18 (5.7) | 15 (2) | 33 |
| Comm. Care Serv. (LP Outer Dr) | 7 | *4.1*/3.7 | 11 (3.5) | 21 (2.8) | 32 |
| Sacred Heart Rehab. (MP) | 3 | *2.7*/3.2 | 8 (2.5) | 23 (3.1) | 31 |
| SAHL/Evangeline - Lawton (DET) | 6 | 3.1 | 11 (3.5) | 15 (2) | 26 |
| Hegira Programs, Inc. (WL) | 12 | *4.6*/3.7 | 10 (3.2) | 15 (2) | 25 |
| Hegira Programs, Inc. (LIV) | 10 | *4.6*/3.7 | 2 (0.6) | 23 (3.1) | 25 |
| Eastwood (LIV) | 13 | *4.2*/3.4 | 7 (2.2) | 15 (2) | 22 |
| STAR CENTER (DET) | 31 | 2.6 | 3 (1) | 11 (1.5) | 14 |
| Sal. Army Harbor Light (3580 Custer) | 23 | 3.4 | 4 (1.3) | 7 (1) | 11 |

| Agency | Agency's Overall Ranking* | DDCAT score** | Group 4 | Group 8 | Total |
|---|---|---|---|---|---|
| NEW LIGHT REC (DET) | 22 | ***2.4***/2.3 | 2 (0.6) | 8 (1.1) | 10 |
| Hegira Programs, Inc. (ROM) | 18 | ***4.6***/3.7 | 3 (1) | 7 (1) | 10 |
| Adult Well Being Services (ROM) | 24 | 3.7 | 3 (1) | 7 (1) | 10 |
| Other*** | n/a | M=3.2 | 14(4.3) | 38(5.0) | 52 |
| Total | | | 316 | 739 | 1055 |

*Agencies are "ranked" in Table 6.6 by the number of total clients served in FY '08, '09 and '10

**DDCAT scores were conducted by either the DWCCMH in 2010 (1st of two scores in italics and bolded) or SEMCA in 2010/11. Some were assessed by both and when both scores were available the DWCCMH is first.

***22 agencies that had less than 10 total clients in group 4 and group 8 were collapsed into the "other" category

One final note: DDCAT scores available from reviews by both DWCCMH and SEMCA are provided above in Table 6.6. If two scores are available, the DWCCMH score is first and highlighted in yellow. Although there is congruence on many of the scores, there are also differences that may change whether a program would fall into a DDC category or DDC/DDE category. Although ratings are only as valid as the process and consistency between raters, it is interesting how the two systems differed in ratings. The overall mean across programs for SEMCA was 3.2, meaning that on average, provider agencies met criteria for Dual Diagnosis Capable (DDC).

## Section 6.3 Client Perspectives

Interviews were conducted with 11 clients in treatment for COD (see Appendix A for description of recruitment and eligibility criteria).

### Participant Profiles

A typical COD treatment participant representing the group interviewed is a Black male, 51 years of age, a high school graduate, unemployed and not looking for work e.g., because retired or disabled, making less than $15,000 per year, and divorced or widowed. Table 6.7 summarizes the demographic characteristics of those interviewed. Since this is a convenience sample of volunteers it is not clear how representative these participants are to other participants receiving treatment for COD in the SEMCA region.

Table 6.7 Demographic Characteristics of Interviewees with COD

| Demographic Characteristic | Mean or % |
|---|---|
| Age | Mean 51.0 (SD 8.8)<br>Range 30-64 |
| Gender<br>Male<br>Female | <br>64%<br>36% |

| Demographic Characteristic | Mean or % |
|---|---|
| Race | |
| White | 46% |
| Black | 54% |
| Education | |
| Less than High School | 18% |
| High School/GED | 36% |
| Some College | 27% |
| College Degree | 18% |
| Relationship Status | |
| Committed | - |
| Formerly Partnered | 54% |
| Single/never partnered | 46% |
| Employment Status | |
| Part-time | - |
| Full-time | - |
| Unemployed-looking | 36% |
| Unemployed-not looking | 64% |
| Income | |
| Less than $15K | 82% |
| $16 – 25K | 9% |
| $26 – 50K | 9% |

## Access to Treatment

*Perceptions of treatment.* The majority of individuals surveyed said they had no preconceived ideas about treatment for substance abuse or mental health before they entered treatment. Among individuals who had ideas about treatment before entering, almost all were negative e.g., "I was scared to death…I had pictures of horrible people wandering around in a coma", "There would be a lot of rules and blaming" and "I figured it would be bad. I just didn't know how."

*Preparing for treatment.* Individuals reported a wide range of time during which they thought about entering treatment before actually doing so. The most common single response was "one day" (n=3). All other responses ranged from one month to 15 years with the majority indicating under 2.5 years (n=6).

Four individuals said that they contacted SEMCA or a treatment agency directly and did not contact anyone else to help them find information about treatment. Seven reported a variety of resources to help them find a treatment agency, including family members, hospital staff, foster care agency staff, and service agency workers where they were already receiving some type of services.

*Reasons for seeking treatment.* All eleven participants said that a "need to change lifestyle" was one of their reasons for seeking treatment. Many described themselves as "tired" of their lifestyle. Nine reported physical-health reasons, with several talking about being hospitalized and/or near death, as a result of their substance

abuse. Nine also reported mental health reasons. One person said, "Mentally it was taking a toll on me where I wasn't able to function" and another reported being suicidal. Financial reasons were also reported by nine people. Six reported employment-related issues, because they were not able to maintain or obtain a job. Five reported legal pressure, with one saying "I did thirty days in jail and… came out realizing…I needed to do something about it." Family-related reasons, namely losing family were cited by five. Three said that education-related issues were part of the reason. Two said that getting older was a catalyst.

*Accessing treatment sooner.* When asked what would have helped them get into treatment sooner, three themes emerged. The most common was the lack of knowledge of SEMCA and its treatment providers. Some said they didn't know that SEMCA existed and some said they did not know they could get into treatment without insurance. One person said, "If I had known about SEMCA…it would have made a big difference." Another theme was lack of family support. Finally, some stated that nothing could have helped them, because they only entered treatment when they were ready.

### Treatment Experience

*Prior treatment experience.* Of the 11 individuals, 10 said that they had been in prior treatment for substance abuse and/or mental health problems. The frequency was slightly higher (n=9) for substance abuse than for mental health (n=6). It is noteworthy that one person who had received mental health treatment over 10 times reported never having received substance abuse treatment services. Conversely, four individuals who reported being in substance abuse treatment between one and six times had not received prior mental health services.

The majority (n=9) said their first treatment experience was for substance abuse, two said it was for mental health issues, and one said that it addressed co-occurring substance abuse and mental health.

*Triggers for relapse.* Participants described a range of feelings such as "good", "down", "uptight" and "angry" as triggers for relapse. One person said that a lack of emotional support or feeling that "no one cares" is a trigger. Social setting expectations and relationships with partners, family members, and others were also high on the list of triggers. People talked about needing to avoid people and places from their past. Psychological cravings were reported as triggers by all participants, while physical cravings and feeling signs of withdrawal were each reported by 60%, and using other drugs was reported as a trigger by 40%.

*Quality of treatment services.* Based on a 1 to 9 scale, with 9 being very high, individuals on average rated the quality of treatment services high, giving a 7.9 rating to substance abuse treatment and a 7.3 rating to mental health treatment.

*Barriers to treatment.* Among the barriers to treatment that were listed, the most common cited (n=7) was not knowing where to call. One person said, "Oh I was always thinking about it, but just didn't know how to get it." Five individuals said that the biggest barrier they faced was their selves, because they changed their minds or did not really try. They described things like being "in denial," not "admitting you have issues with drugs or mental illness because of the stigma," and not wanting "the rules and regulations." Other choices, with five responses, were "transportation" and "could not afford treatment." Four people said they had eligibility

problems or difficulty making arrangements, e.g., being a single parent and not knowing how to arrange for childcare. Four others said they did not face any barriers. Wait lists, not having insurance, or insurance not covering treatment were next, with three responses each. Legal involvement was cited as a barrier by two individuals, and cultural factors were cited by one. Another person noted that treatment agencies are often located in neighborhoods where drug activity is high, and she did not want to be surrounded by that environment. It should be noted that SEMCA does provide for childcare expenses and also has treatment available where women can bring their children. In addition, if a person is waiting for a specific service or facility, other treatment options are offered.

*Recovery and Support.* Individuals reported with high frequency that they would make use of almost every potential support service following treatment, including volunteer organizations, health care organizations, social service agencies, colleges/universities, employment agencies, religious organizations, and employee assistance programs. "Courts" was the only category with a low response (n=3).

When asked to describe what recovery means to them, participants often expressed it in broad terms as "a way of life" and an "ongoing process". They spoke most frequently about the need to "stay clean and sober." Some mentioned specific tasks, like finding hobbies, spending more time with family, or attending treatment group regularly. Perhaps most salient is that they described wanting to "be productive" and "contribute to society", and several specifically stated that they wanted to "help others."

## Section 6.4 Perspectives on Need

Fourteen interviews with substance abuse and mental health treatment staff, law enforcement, etc. were conducted (see Appendix A for list of participants). Individuals expressed a high need for COD treatment in the SEMCA region (Mean=1.64 on a scale of 1 to 5, with 1 being the greatest need and 5 being the least need).

When interviewees were asked to discuss the needs of clients with COD, themes that were related to needs that could be addressed at the systems level emerged and others pertained more to direct interactions with individuals in treatment/recovery. The topic most frequently mentioned was the need for educating the community on two levels: knowledge and awareness. Individuals described the need to educate the community about treatment providers and their locations so that people know how and where to access treatment services "because not everybody knows how to get the help [and] not everybody knows about SEMCA." On a broader level, individuals described the need for education, in terms of providing awareness and addressing stigma "We need to reduce the stigma attached to substance abuse and mental health issues…by sharing our stories."

Some individuals highlighted the importance of models like evidence-based practices and the Recovery Oriented System of Care (ROSC) in providing optimal treatment for COD. People with a long history working in the system noted the progress that has been made over the years, stating "We've come a long way with [co-occurring treatment]" and that the quality of treatment is "increasing with knowledge and with evidence-based practices." Also, at a systems level, one individual cited the need for interagency agreements

that explain the vision and expectations of collaborative treatment so that everyone understands and participates and "has a sense of urgency about" treating COD.

Regarding direct approaches, key informants talked about the need for a holistic approach that addresses a full spectrum of health issues, including substance abuse, mental health, and physical health. One person stated, "We know that this population has more medical and psychological co-morbidities than the general population but it seems that's been left out." In addition to health, interviewees talked about the need for social, economic, and legal issues to be addressed in order for individuals in treatment to have the best chances of recovery. For example, one interviewee emphasized that housing is a top priority for those seeking treatment.

Interviewees reported that they have found strategies like motivational interviewing, peer-support services, and a person-centered approach to be most helpful in assisting individuals with COD in their recovery. In addition, many talked about the necessity for treatment providers to acknowledge the high rates of trauma among the population and to provide trauma-informed services. Others referred to culturally competent services being important for specific populations that are less likely to seek treatment for substance abuse and mental health issues.

Clients were also asked what they needed to be successful in substance abuse treatment. COD participants most frequently spoke of the need for "emotional support" from staff and family. They said they needed "someone to listen" and "counselors who care" so that they could "feel comfortable and learn to open up." Regarding clinical relationships, they also talked about the importance of having a good relationship with the psychiatrist and the ability to see the psychiatrist on a regular basis to work together to find the right combination or dosage of medication. Participants said it was important for mental health needs to be addressed in their substance abuse treatment and for a continuum of treatment modalities, so that individuals are able to continue in the appropriate level of care. Individuals mentioned the need for intensive outpatient services and safe and secure housing after leaving inpatient.

### Participant Voices

To present a more thorough account of participant voices, we provide vignettes of two individuals who were interviewed. We chose to focus on two individuals whose stories differ in many ways e.g., in terms of their age, gender, barriers to treatment, reasons for entering treatment, length of time in treatment, and treatment history, but ultimately they have shared goals and expected outcomes. In presenting these different vignettes, we hope to provide insight into the unique stories of individuals with COD and ways that treatment may be tailored

to fit each person's needs.

*T006: T006 is a young adult whose first treatment experience for either drug addiction or mental health issues was 4 months prior to the interview. She decided to enter treatment because of money problems, legal problems, and housing problems. In her words "I mean, everything just all came together and it was basically now or never". She was living out of state with her boyfriend, who was also addicted to drugs, so she called her parents to ask for help. Her mom made phone calls for her, and found that "SEMCA was definitely the most helpful because it was…immediate [and] you got a phone number [and] you got somewhere that was local." She would have sought treatment earlier "If I stopped lying…to myself and to others." She said "I had really bad anxiety my whole life [but] hid it pretty well… and I just started finally now, after going through all of this, seeking the help that I needed for it years and years ago".*

*She faced two significant barriers to treatment. First was a financial barrier before finding that SEMCA existed and would provide treatment to her, even though she was uninsured. Her second barrier was getting a Michigan ID to be treated by SEMCA. She first entered inpatient treatment, but only stayed for one week because "it was too much for me to handle with my anxiety". After leaving inpatient treatment, she continued in intensive outpatient treatment (IOP). She stated that even IOP has been challenging because attending groups where she listens to everyone else's problems increases her anxiety, but she sees it as "something I had to go through for myself" and is looking to increase her one-on-one therapy sessions.*

*She has been impressed with the community's reaction because when she tells people that she's in recovery, "They're like, 'Wow, that's great! You're getting your life together'". In her recovery, her goals are to stay clean, get a job and become a member of society who is "able to contribute… to the world".*

*T004: T004 is a middle-aged adult with depression and a thirty-year history of abusing drugs. He has never received mental health treatment, but entered substance abuse treatment between six and ten times. He said he always relapsed because at that time, "I wasn't ready. I was just tired [and] hungry, didn't have nowhere to stay. I know I can eat, sleep, bathe…do 30 days, 60 days, and I'm back…" He decided to enter treatment for substance abuse and depression three years ago because he was tired of being "homeless, sleeping in abandoned houses, cars, garages…not being able to eat or bathe" and his girlfriend was pregnant with his first child. "I had to get really tired of just being out there…It was enough me being 50 and messed up…I was just getting too old for that". He said that nothing could have helped him stay sober prior to this time because "being out there for so long, you get used to it…and you kinda…master what you are doing and are able to survive or settle". He found that he, himself, was his only barrier to entering treatment and maintaining sobriety. "I knew there were places to go…I just didn't want to deal with rules and regulations."*

*He pointed out that his mental health and substance abuse affected each other because "[They] had me fooled… At times I wanted to kill myself… At times I thought this is what I like to do…This is me…being dirty…Everything that I was doing I thought it was right". His most recent substance abuse treatment experience was what "made me really take a look at myself …what [this treatment center] had to offer me, and what I had to do in order to recover… I listened to a lot of people and they told me it was all up to me… and I*

*knew if I really wanted to do it, I could". His main recovery goal is to "be able to help someone that has a drug problem…or is going through a depression".*

## Section 6.5 Care Net Data: COD Compared to SUD Alone

We examined Care Net data to determine the number of individuals identified as having COD. Mental health diagnoses were categorized in one of three groups: serious mental illness (SMI) defined as bipolar disorder, schizophrenia or major depressive disorder; depressive disorder NOS (not otherwise specified) and other , which included adjustment disorder, anxiety disorder, attention deficit hyperactivity disorder, conduct disorder, disruptive disorder, dysthymic disorder, obsessive compulsive disorder, oppositional defiant disorder, panic disorder, phobic disorders, and post-traumatic stress disorder. Of the 9,106 individuals served, we ran the analysis on 8,850 cases that had valid diagnosis data. Of those, just over half (51.0%) had a diagnosed COD, with 2,115 having SMI, 1,037 having depressive disorder NOS, and 1,358 having "other" (Table 6.8).

Next we examined characteristics of those with COD, compared with characteristics of those with SUD alone. Individuals who were female, White, and unemployed were more likely to have a COD than SUD alone. Regarding clinical information, those with COD in general were more likely to report cocaine or opiates as their primary substance, while individuals with SUD alone were more likely to report alcohol or cannabis. Interestingly, 25.4% of those with SUD alone (i.e., no documented mental health diagnosis) were documented as having mild/moderate or high mental health status. Conversely, 26.9% (n=1,212) of those with mental health diagnoses had a mental health status documented as none.

ASAM Patient Placement Criteria is used to assess six dimensions, which help to determine level of care, carry out effective treatment planning, and make decisions about continued service or discharge. There are five principal levels of care: Early Intervention, Outpatient, IOP/Partial Hospitalization, Residential/Inpatient, and Medically Managed Intensive Inpatient. ASAM Dimension 3 ("Emotional, Behavioral, and Cognitive Conditions and Complications") is the dimension associated with mental health issues. In the Care Net data, we see in Dimension 3 that more individuals are assessed in the 'medium' level (52.2%) than 'low' (28.1%) or 'high' (19.7%). Among those with no mental health diagnosis, 89.5% were assessed as having 'low' or 'medium' placement needs in relation to their mental health; however, 10.5% (n=450) were assessed as having 'high' placement needs. This could be attributed to the presence of cognitive or developmental disabilities. In other cases, a subsequent psychiatric evaluation may address this issue if the individual is displaying or reporting symptoms, but does not have a diagnosis yet.

Not surprisingly, individuals with SMI had the highest number of treatment admissions (2.2) compared with individuals with SUD alone (1.8). In addition, we would expect, as the data shows, that individuals with SUD alone are more likely to receive treatment in outpatient settings, while individuals with COD are more likely to receive treatment in residential or intensive outpatient settings. Rates of treatment completion are significantly higher for individuals with SUD alone than for individuals with any type of COD diagnosis, especially SMI. On the other hand, those with COD are more likely than those with SUD alone to have left treatment or to have a discharge status of continue. Those who are documented as continuing treatment are expected to transfer to a

different level of care (either higher or lower) at the same agency or at another provider agency within the SEMCA region.

Table 6.8 Demographic Characteristics Comparing Individuals with COD and with SUD Alone

| Demographic Characteristic | Total Population N=9,106 | Mental Health | | | |
|---|---|---|---|---|---|
| | | SMI n=2,115 | Depression NOS n=1,037 | Other Mental Health Dx n=1,358 | None n=4,340 |
| Gender | | | | | |
| Male | 61.8% | 50.0% | 57.7% | 58.8% | 69.8% |
| Female | 38.2% | 50.0% | 42.3% | 41.2% | 30.2% |
| Race | | | | | |
| White | 76.2% | 77.3% | 79.3% | 86.3% | 72.6% |
| Black | 18.6% | 17.5% | 16.4% | 9.1% | 22.6% |
| Other | 5.2% | 5.3% | 4.4% | 4.5% | 5.8% |
| Age | 33.6<br>32 (median)<br>Range 12-69 | 35.2 (11.0) | 34.7 (11.3) | 31.0 (10.6) | 33.1 (12.0) |
| Employment | | | | | |
| Full-time | 7.4% | 3.8% | 6.1% | 7.4% | 9.5% |
| Part-time | 11.9% | 8.1% | 9.0% | 11.3% | 14.5% |
| Unemployed | 66.1% | 68.9% | 70.1% | 65.5% | 62.6% |
| Not in labor force | 13.0% | 17.2% | 12.9% | 12.9% | 11.7% |
| N/A | 1.6% | 2.0% | 1.9% | 2.9% | 1.7% |
| Education | | | | | |
| <= 8th grade | 4.6% | 6.0% | 4.1% | 4.0% | 4.2% |
| 9-11th grade | 30.8% | 32.9% | 26.5% | 31.2% | 30.8% |
| 12th grade | 41.9% | 39.1% | 44.7% | 39.1% | 43.4% |
| >12 - <16 years | 19.2% | 18.8% | 19.8% | 21.9% | 18.4% |
| 16+ (BS/BA/Grad) | 3.5% | 3.3% | 4.8% | 3.8% | 3.2% |
| Drug Court (Admissions Record) | | | | | |
| Yes | 3.0% | 1.5% | 4.0% | 3.0% | 3.6% |
| No | 97.0% | 98.5% | 96.0% | 97.0% | 96.4% |
| # Arrests past 5 years | | | | | |
| 0 | 32.0% | 37.0% | 33.4% | 30.6% | 29.2% |
| 1 | 28.0% | 23.8% | 28.3% | 27.2% | 30.4% |
| 2 | 17.8% | 14.9% | 17.7% | 18.6% | 19.0% |
| 3 | 9.4% | 9.4% | 9.0% | 10.2% | 9.5% |
| 4+ | 12.8% | 14.9% | 11.7% | 13.4% | 11.8% |

Table 6.9 Clinical and Treatment Variables of Individuals with COD and with SUD Alone

| | Total Population N=9,106 | SMI n=2,115 | Depression NOS n=1,037 | Other Mental Health Dx n=1,358 | None n=4,340 |
|---|---|---|---|---|---|
| Primary Substance (from assessment) | | | | | |
| Alcohol | 39.6% | 37.4% | 40.4% | 37.1% | 41.6% |
| Cocaine | 12.4% | 17.7% | 13.6% | 8.0% | 10.4% |
| Cannabis | 15.1% | 9.5% | 12.2% | 15.1% | 18.6% |
| Opiates | 30.6% | 32.7% | 31.1% | 35.1% | 27.7% |
| Other | 2.5% | 2.7% | 2.6% | 4.8% | 1.6% |
| Mental Health Status | | | | | |
| None | 50.6% | 18.3% | 34.8% | 34.2% | 74.8% |
| Mild/Moderate | 45.1% | 71.2% | 62.2% | 61.3% | 24.3% |
| High | 4.2% | 11.5% | 3.0% | 4.6% | 0.9% |
| High Severity Mental Health | | | | | |
| Yes | 9.4% | 17.9% | 12.6% | 8.4% | 4.6% |
| No | 90.6% | 82.1% | 87.4% | 91.6% | 95.4% |
| ASAM Dimension 3 | | | | | |
| Low | 28.1% | 10.0% | 13.3% | 16.2% | 43.5% |
| Medium | 52.2% | 57.7% | 60.8% | 58.3% | 46.0% |
| High | 19.7% | 32.3% | 25.9% | 25.5% | 10.5% |
| Treatment Episodes | M=1.29 | 1.4 (0.8) | 1.3 (0.7) | 1.3 (0.7) | 1.3 (0.6) |
| Treatment Admissions | M=1.95 | 2.2 (1.8) | 2.0 (1.6) | 2.1 (1.7) | 1.8 (1.3) |
| Service Category | | | | | |
| Outpatient | 44.6% | 29.6% | 38.5% | 44.3% | 52.4% |
| Residential-DT | 26.3% | 30.8% | 26.6% | 30.6% | 23.6% |
| Resid.-Short | 9.1% | 11.6% | 8.8% | 9.8% | 8.0% |
| Resid.-Long | 0.5% | 0.2% | 0.2% | 0.0% | 0.8% |
| Intensive Outpt. | 19.4% | 27.8% | 25.9% | 15.2% | 15.3% |
| Discharge Status of First Episode | | | | | |
| -Completed Tx | 29.6% | 21.4% | 27.1% | 23.4% | 36.4% |
| -Left | 39.3% | 41.1% | 42.3% | 42.6% | 37.0% |
| -Continue | 14.2% | 19.8% | 15.6% | 14.9% | 11.2% |
| -Other | 16.9% | 17.8% | 14.9% | 19.1% | 15.5% |

Table 6.10 lists all agencies in order of the number of clients served and includes the DDCAT score, when applicable, and a breakdown of mental health diagnosis frequency. This table allows us to see which agencies

are serving the largest proportion of clients overall in relation to the proportion of clients with different types of mental health issues. We see that several of the top ten providers (e.g., Hegira, CCS, and Eastwood) are also the largest providers for COD, in addition to having high DDCAT scores (i.e., at or greater than 4). It is interesting to note the variance in mental health category prevalence by agency. For example, Hegira (Canton) serves a larger proportion of individuals with SMI, while CCS (Taylor) serves a larger proportion of individuals with Depression NOS.

Table 6.10 Agency at Admission (Agencies with higher proportions are listed at the top)

| | | | | Mental Health | | | |
|---|---|---|---|---|---|---|---|
| | Agency at Admission | DDCAT score* | Total Population N=9,106 | SMI n=2,115 | Depression NOS n=1,037 | Other Mental Health Dx n=1,358 | None n=4,340 |
| 1 | Hegira Programs Inc. (CAN) | 3.7 | 24.9% | 34.2% | 27.2% | 28.4% | 19.7% |
| 2 | The Guidance Center (ALLEN) | 4.0 | 10.1% | 9.2% | 10.7% | 11.9% | 10.3% |
| 3 | Sacred Heart Rehab. (MP) | 3.2 | 9.2% | 10.6% | 8.0% | 13.8% | 7.5% |
| 4 | Comm. Care Serv. (TAY) | 3.7 | 6.0% | 3.3% | 15.3% | 4.7% | 5.7% |
| 5 | Eastwood (DB) Auto Club Drive | 3.4 | 5.3% | 6.5% | 3.9% | 3.5% | 5.6% |
| 6 | SAHL/Evangeline - Lawton (DET) | 3.1 | 4.9% | 5.6% | 2.7% | 0.7% | 6.3% |
| 7 | Comm. Care Serv. (LP Outer Dr) | 3.7 | 4.6% | 2.0% | 2.4% | 1.5% | 7.2% |
| 8 | Catholic Charities of Monroe (CSS MON) | 3.2 | 3.9% | 3.2% | 5.2% | 7.0% | 3.1% |
| 9 | Personal Nursing Lighthouse (PLY) | 3.5 | 3.7% | 3.0% | 6.8% | 3.5% | 3.0% |
| 10 | Hegira Programs Inc. (LIV) | 3.7 | 3.3% | 2.7% | 1.1% | 3.2% | 4.3% |
| 11 | Redford Counseling (RF) | 3.1 | 3.1% | 1.8% | 3.7% | 2.5% | 3.8% |
| 12 | Hegira Programs Inc. (WL) | 3.7 | 2.6% | 2.6% | 1.3% | 2.7% | 2.7% |
| 13 | Eastwood (LIV) | 3.4 | 2.4% | 2.3% | 0.2% | 1.5% | 3.2% |
| 14 | Beginning Step | 3.1 | 2.1% | 4.8% | 2.4% | 1.9% | 0.65% |
| 15 | Black Family Dev, (HP) | 3.0 | 1.5% | 0.6% | 0.7% | 2.4% | 1.9% |
| 16 | Eastwood (RO) | 3.4 | 1.5% | 0.8% | 0.6% | 1.3% | 2.2% |
| 17 | Wolverine Human Services | 0.0 | 1.2% | 0.2% | 0.8% | 0.5% | 1.9% |
| 18 | Hegira Programs Inc. (ROM) | 3.7 | 1.1% | 1.4% | 0% | 0.7% | 1.3% |
| 19 | NARDIN (DET) | 2.0 | 0.8% | 0.05% | 0.1% | -- | 0.7% |

| | | | | Mental Health | | | |
|---|---|---|---|---|---|---|---|
| | Agency at Admission | DDCAT score* | Total Population N=9,106 | SMI n=2,115 | Depression NOS n=1,037 | Other Mental Health Dx n=1,358 | None n=4,340 |
| 20 | Sal. Army Harbor Light (25 S Mon) | 3.4 | 0.7% | 1.1% | 0.2% | 1.8% | 0.25% |
| 21 | Eastwood (EP) | 3.4 | 0.6% | 0.2% | 0.3% | 0.8% | 0.8% |
| 22 | NEW LIGHT REC (DET) | 2.3 | 0.6% | 0.3% | 1.0% | 0.7% | 0.65% |
| 23 | Sal. Army Harbor Light (3580 Custer) | 3.4 | 0.6% | 0.3% | 0.3% | 0.1% | 1.1% |
| 24 | Adult Well Being Services (ROM) | 3.7 | 0.5% | 0.3% | 0.3% | 0.2% | 0.7% |
| 25 | PARKVIEW COUNS (DET) | -- | 0.5% | 0.2% | 0.1% | -- | 0.8% |
| 26 | Personal Nursing Lighthouse (AA) | 3.5 | 0.5% | (0.2% | 1.0% | 0.1% | 0.5% |
| 27 | Comm. Care Serv. (BELL) | 3.7 | 0.4% | 0.05% | -- | 0.1% | 0.8% |
| 28 | Kairos Healthcare (SAG) | 3.1 | 0.4% | 0.2% | 0.9% | 1.25% | 0.1% |
| 29 | Growth Works (CAN) | -- | 0.3% | 0.05% | 0.0% | 0.1% | 0.5% |
| 30 | NSO-Calvin Wells Treatment Center | -- | 0.3% | 0.1% | 0.5% | 0.4% | 0.3% |
| 31 | STAR CENTER (DET) | 2.6 | 0.3% | 0.05% | 0% | 0.1% | 0.5% |
| 32 | Holy Cross Children's Services (MON) | -- | 0.2% | 0.1% | 0.7% | 0.5% | -- |
| 33 | Mercy Memorial Hosp Family Center | -- | 0.2% | 0.2% | 0.1% | 0.1% | 0.2% |
| 34 | Personal Nursing Lighthouse (CAN) | 3.5 | 0.2% | 0.2% | 0.1% | 0.1% | 0.2% |
| 35 | UNIVERSITY PSYCH (DET) | -- | 0.2% | 0.1% | 0.5% | 0.2% | 0.2% |
| 36 | Vista Maria | -- | 0.2% | 0.1% | 0.1% | 0.2% | 0.1% |
| 37 | Adult Well Being Services (DET-Connor) | 3.7 | 0.1% | 0.05% | -- | -- | 0.1% |
| 38 | DRMission (HP) Christian Guid. Ctr | -- | 0.1% | 0.2% | -- | -- | 0.1% |
| 39 | Hegira Programs Inc. (NTHV) | 3.7 | 0.1% | 0.2% | 0% | 0.4% | 0.05% |
| 40 | NCADD (Wayne) | -- | 0.1% | -- | 0.1% | -- | 0.2% |
| 41 | Sacred Heart (Det) | 3.2 | 0.1% | 0.2% | -- | 0.1% | 0.1% |
| 42 | Sacred Heart Rehab. (Clearviw PH) | 3.2 | 0.1% | 0.2% | 0.4% | 0.1% | 0.1% |
| 43 | MILLENNIUM TX (WAR) | -- | 0.05% | 0% | 0% | 0.1 | 0.1% |
| 44 | Motivational | -- | 0.05% | 0.1% | 0.2% | -- | 0.02% |

| | | | | Mental Health | | | |
|---|---|---|---|---|---|---|---|
| | Agency at Admission | DDCAT score* | Total Population N=9,106 | SMI n=2,115 | Depression NOS n=1,037 | Other Mental Health Dx n=1,358 | None n=4,340 |
| | Empowerment Counsg Ctr & Assoc | | | | | | |
| 45 | NCADD (Wyoming) | -- | 0.05% | -- | -- | 0.1% | 0.1% |
| 46 | Personal Nursing Lighthouse (DET) | 3.5 | 0.05% | -- | 0.1% | -- | 0.02% |
| 47 | Adult Well Being Services (DET-Field) | 3.7 | 0.04% | 0.05% | -- | 0.1% | 0.05% |
| 48 | Premier Serv (WAR) | -- | 0.04% | 0.05% | 0.3% | -- | -- |
| 49 | Family Services (DB) | -- | 0.03% | 0% | 0% | 0.1% | 0.02% |
| 50 | DRMission (DET) Genesis House III/ Fair Haven House | -- | 0.02% | 0.05% | 0.1% | -- | -- |
| 51 | MILLENNIUM TX (MAD H) | -- | 0.02% | 0% | 0% | 0% | 0.05% |
| 52 | PARKVIEW COUNS (DB H) | -- | 0.02% | 0% | 0% | 0% | 0.05% |
| 53 | Premier Services (MH) | -- | 0.02% | | -- | 0.1% | -- |
| 54 | Sacred Heart Rehab (WAR) | 3.2 | 0.02% | 0.05% | -- | 0.1% | 0% |
| 55 | Spectrum Human Services | -- | 0.01% | -- | -- | 0.1% | -- |

*Note*: Based on first admission; * DDCAT scores from SEMCA FY 2010/11

## Summary and Recommendations

Data from SEMCA reveals that 51% of those admitted into treatment have some form of mental health issue and that 25% have a serious mental illness. Once in treatment, the majority are identified in the screening and assessment process and assigned to providers that are on average Dual Diagnosis Capable (DDC) with several providers striving toward Dual Diagnosis Enhanced (DDE). Many of these provider agencies are licensed to provide mental health and substance abuse treatment services. Executive Directors, as well as treatment staff, from those provider agencies are engaging in training and service improvement toward integrated treatment, with the majority of them rating their own agencies as DDE. Treatment participants remark on how treatment for co-occurring disorders has improved and the congruence with Recovery Orientated Systems of Care. These are noteworthy achievements that mark remarkable growth, system-wide, over the past decade.

As SEMCA moves forward in strengthening awareness of COD and treatment accessibility and availability for individuals with COD, a few areas are worth taking a closer look.

- National data indicates that 36% of those with SMI and a co-occurring SUD do not obtain treatment. Community outreach efforts, perhaps into acute care settings or other specialty areas, may provide access to those unfamiliar with SEMCA's community role. Many of those with COD interviewed for this needs assessment said they were unaware of treatment availability or that they could find it through SEMCA.

- Similarly, many treatment participants do not experience their treatment as integrated. They refer separately to mental health and substance abuse treatment programs/systems – often with different providers – still fully engaged in treatment silos. It may be the result of participants who are likely to have a SMI and may require ongoing engagement in the mental health service sector, but if this is the case, it would seem that a provider who is licensed in both substance abuse and mental health treatment and offering integrated dual diagnosis treatment (IDDT) would be the preferred provider.

- Increasing collaboration and integration with the acute health care system may provide outreach with populations that are not currently being reached, as well as provide community linkages with a medical system that may have a greater opportunity for screening and assessment of both substance abuse and mental health disorders. This may also reduce the stigma associated with both disorders and increase the acceptance of these concerns as a standard part of health care information gathering.

- A small proportion (12%) of those admitted into SEMCA's treatment system were misidentified on their mental health diagnosis between assessment and discharge in such a way that it may have affected their course of treatment. All of these individuals were negative for mental health issues at the time of assessment (some were positive on initial screen, others were negative) but positive at discharge. It may be that behaviors which were initially thought related to drug/alcohol misuse were identified as mental health symptoms upon discharge. It is unclear if these individuals would have been referred to mental health treatment at discharge or if their care plans included any attention to mental health issues during their treatment. Although these cases represent a small fraction over the three years of analysis, many of them were flagged with a serious mental health problem and could be a threat to themselves or others. This may suggest training issues or the need for an agency-wide plan of action to review files at discharge in cases for which mental health is identified as a problem that was not recognized previously.

- The DDCAT reviews conducted by SEMCA in FY 2010/11 show that the average across all reviews is 3.2 – suggesting that the average across providers is within the DDC level of care. Interestingly, both Executive Directors and treatment staff rate their agencies at higher levels with 60% rating their agency as DDE. It may be that the gap between the reviews and our survey allowed greater training and awareness among providers. It also may indicate that agency staff is not always aware of the details that differentiate DDC and DDE agencies. Although the majority of agencies have trained over half their staff in COD, there is a need for ongoing training. Furthermore, future DDCAT reviews are suggested.

- Interviews with treatment participants indicate that they feel isolated and that they lack support from families/friends. This isolation can often be a catalyst for relapse and, as those with SMI are already more likely to be admitted into treatment than other groups, alternatives for community

supports should be a high priority. 'Double Trouble' recovery/support groups could be helpful, as well as having such resources available at Club Houses around the community.

- Although women comprise only 38% of all SEMCA clients, they are 50% of those with SMI. Attention to the specific needs of women with a COD – particularly trauma informed services – is important.

- On a systems level, SEMCA and the CMH may want to reinforce the classification of treatment settings to facilitate systematic planning, consultations, collaborations, and integration.

# Chapter 7: Criminal Justice Involvement and Substance Abuse

## Introduction

The association between substance abuse/misuse and criminal behavior has been well established. Treatment, particularly approaches that combine community-based treatment with ongoing criminal justice supervision or a continuum of care that includes both institutional and community-based treatment, has been successful in reducing substance use, as well as recidivism (i.e., new arrest) (De Leon, Melnick, Thomas, Kressel, & Wexler, 2000; Harrison & Martin, 2003; Knight, Hiller & Simpson, 1999; Pelissier, Jones & Cadigan, 2007). Implicit within these successful paradigms is a continuum of care that facilitates treatment across various criminal justice sanctions, for example providing access to treatment in prison and jail (i.e., institutional) settings and continuing treatment in the community after an offender has been discharged onto parole or probation.

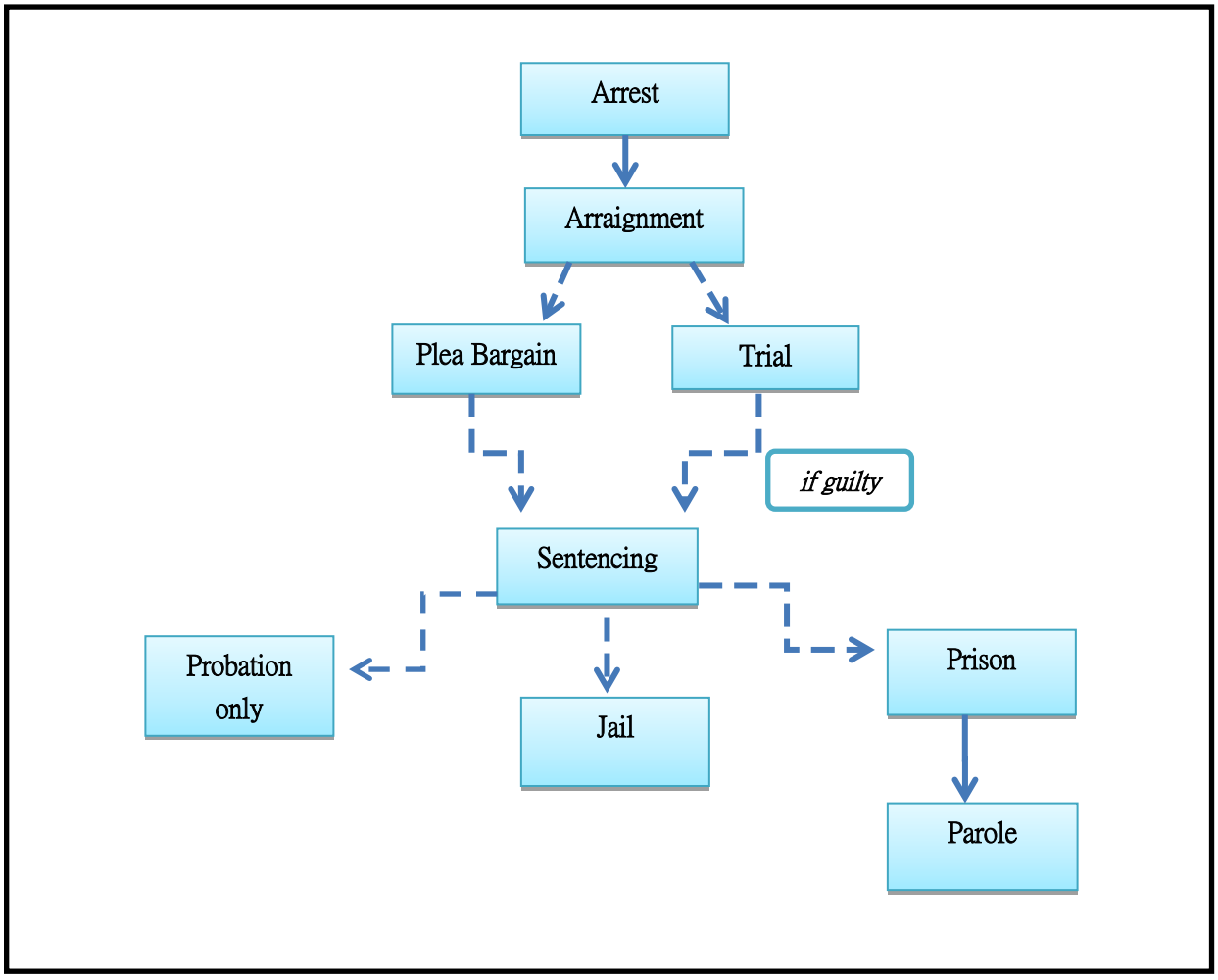
Examining access to community-based treatment for offenders is important as the majority of individuals involved in the criminal justice system are in the community under probation and parole supervision (Maguire & Pastore, 2005). Furthermore, for community-based treatment facilities in the United States, criminal justice referrals represent a substantial source of clients: In 2006, 38% of treatment episodes were referred by criminal justice entities (U.S. Department of Health and Human Services, 2006).
This section assesses the various junctures across the criminal justice continuum at which there exist opportunities to identify and/or treat substance misuse. Therefore we provide information assessing needs at various stages, as well as analysis of data from SEMCA's current clients, comparing those without criminal justice involvement to those with various levels of criminal justice involvement (courts, probation/parole; institutional). Next, we discuss current treatments available through drug courts across the region, as well as treatment funded by community corrections or Michigan Department of Corrections (MDOC) within the SEMCA region. We begin with a definition of the problem and an explanation of the phases across the criminal justice continuum.

## Section 7.1 Problem Definition

The criminal justice system in the U.S. is comprised of various systems (e.g., courts, jails, prisons, probation, parole) that are organized by jurisdiction (federal, state, county and municipal). Jurisdiction level is determined by the location and severity of the offense. At each level there are several major subsystems, including police and/or other law enforcement agencies, the court system, prosecution and public defender offices, the department of corrections (e.g., operating probation/parole), and jails and prisons.

Figure 7.1 below illustrates the various phases of the criminal justice system, beginning with arrest and continuing through arraignment, trial, sentencing and sanctions. Due to the high correlation between criminal behavior and substance use/misuse, the possible need for intervention and treatment at each of the various phases of the criminal justice system exists. As part of defining the problem within the SEMCA region, we review available data for evidence of use and misuse of drugs and alcohol among those at various stages in the criminal justice system.

Figure 7.1 Criminal Justice System Flow




## Arrest Data

Information about drug use at the time of arrest comes from Arrestee Drug Abuse Monitoring, or ADAM, a survey conducted by the U.S. Department of Justice to gauge the prevalence of alcohol and illegal drug use among arrestees. ADAM was a reformulation of the prior Drug Use Forecasting (DUF) program, focusing on finding the prevalence of the use of five drugs among men and women arrested in particular cities. In particular the drugs were cocaine, marijuana, methamphetamine, opiates, and PCP. Detroit was one of the

data-collection sites between 1998 until 2001 (Note: a revival of the program in 2007 decreased the number of sites to 10 and Detroit was not among them). Information was obtained from personal interviews and urine analysis obtained voluntarily and confidentially, usually on the day of arrest and always within 48 hours of arrest.

In the last year of available ADAM data from Detroit (2001), six of the 55 jail facilities in Wayne County were surveyed, yielding a total of 1,080 male arrestees. Although data for females was not collected in Detroit in 2001, the table below provides use indicators of the five drugs for males in Detroit, and the national figures for males and females.

Table 7.1 Percentage of Positive Drug Screens among Arrestees (2001)

| | Males; Detroit Only | Males; National | Females; National |
|---|---|---|---|
| Cocaine | 22.2 | 29.1 | 30.7 |
| Opiates | 7.2 | 5.4 | 7.7 |
| Marijuana | 47.8 | 42.7 | 27.7 |
| Methamphetamines | 0.0 | 2.6 | 11.4 |
| PCP | 0.0 | 1.3 | 0.2 |
| Any Drug | 64.2 | 63.6 | 63.9 |
| Multiple Drugs | 11.1 | 21.4 | 22.4 |

(Source: Drug use and related matters among adult arrestees, 2001. ADAM; www.ncjrs.gov/nij/adam/adam2001.pdf).

In addition to data on the drugs indicated by drug screens, the ADAM data provides us with information about severity of drug use and whether individuals meet criteria for diagnosis of a substance-use disorder (SUD). Table 7.2 below covers characteristics of drug and/or alcohol use for males in Detroit, as well as males and females nationally. In 2001, males in Detroit were much less likely to inject drugs than national averages for males or females indicate. In addition, males in Detroit were less likely to have a pattern of heavy alcohol use and binge drinking than did males nationally. It is important to note that approximately 38% of males booked into the jail in Detroit were classified as heavy drug users and 38% had a drug dependence.

Table 7.2 Drug Use Indicators among Arrestees by Percent of Population (2001)

| | Males - Detroit Only | Males - National | Females - National |
|---|---|---|---|
| Heavy Drug Use | 37.7 | 39.6 | 34.7 |
| Drug Dependence | 38.0 | 38.6 | 42.1 |
| Drug Injection | 3.3 | 7.6 | 8.1 |
| Heavy Alcohol Use | 23.6 | 28.9 | 19.6 |

| | Males - Detroit Only | Males - National | Females - National |
|---|---|---|---|
| Binge Drinking | 44.0 | 50.6 | 35.9 |
| Alcohol Dependence | 25.9 | 30.3 | 25.5 |

(Source: Drug use and related matters among adult arrestees, 2001. ADAM; www.ncjrs.gov/nij/adam/adam2001.pdf).

## Courts

There are courts at the municipal level, called district courts, and courts at the county level, called circuit courts. Generally, individuals are arraigned at the district court to determine if there is enough evidence to be charged with a specific offense. If the offense is a misdemeanor or low- level felony, they may be processed and tried at the district court level. If the offense is a more serious felony, then the individual is usually brought to circuit court for the trial and may be held in the county jail pending trial and/or sentencing.

"Although some courts may include an assessment of drug and alcohol problems as part of a probation or court report, many courts do not employ standardized instruments to assess substance use disorders and individuals with drug or alcohol related crimes may not be referred to specialized programs."

Many of the district courts within the SEMCA region have specialty courts called drug or sobriety courts. In addition, at the circuit-court level there is a drug court and a mental health court. Finally there is a county-wide juvenile drug court. In these courts more attention is paid to assessing the presence of substance use/misuse through various mechanisms: some courts use a contracted professional from a treatment agency to provide the assessment, some use a standardized screening form and others rely on either the characteristics of the offense, history, or questions developed within the court. A broader discussion of each of these courts, as well as the number of individuals utilizing these specialty courts, appears in a later section of this chapter.

## Jailed Population

After arrest, a person is arraigned to determine if there is enough evidence to officially charge the person with a criminal offense. Often, once that determination is made, the person is booked into a local jail. Each municipality has its own court and jail, but these generally have a very limited capacity and are only suitable for short-term stays. If the offense is serious enough (e.g. felony), the person in the local jail will often be transferred to the county jail. The rapid turnover and small capacity in

"…there is currently no routine mechanism for standardized screening or assessment of substance use/misuse when a person enters the jail."

these municipal level jails often limit screening, assessment and intervention activities. Therefore, for this report, we focus on the county-level jails as a more comprehensive source of information on the need for services related to substance use/misuse.

*Wayne County Jail.* On average the Wayne County Jail processes 45,000 individuals each year, with an average daily population of 2,600 detainees. Those detained in this facility may be awaiting trial or are already convicted and serving sentences for misdemeanors or felonies. Similar to national statistics concerning the composition of county jail populations (87% male versus 13% female; Harrison & Beck, 2006), approximately 89% of detainees housed in this facility are male. Although a mental health clinician sometimes assesses individuals displaying signs and symptoms of mental or emotional distress, they often find that drugs and/or alcohol are a catalyst for such distress.

Therefore, data available on the prevalence of substance use disorders among those in the jail is limited. In 2008 a survey was administered to 494 men and 231 women (N=725) who were booked into the Wayne County Jail after their arraignments. At the time of the survey the average age of the respondent was 33 years of age (males averaged 32 years old; females averaged 34) and the individual had been in the jail an average of 27 days prior to survey administration. The survey, administered in privacy by university researchers, queried for symptoms of serious mental illness (SMI), substance-use disorders (SUD), homelessness prior to incarceration and recent history of sexual or physical trauma/assault (See Kubiak, Beeble, & Bybee, 2009; 2010; forthcoming; Fries, Fedock & Kubiak, under review).

"…the high proportion of female jail detainees with a SUD in Wayne County illustrates a much higher than national average of drug/alcohol dependence among criminally involved women."

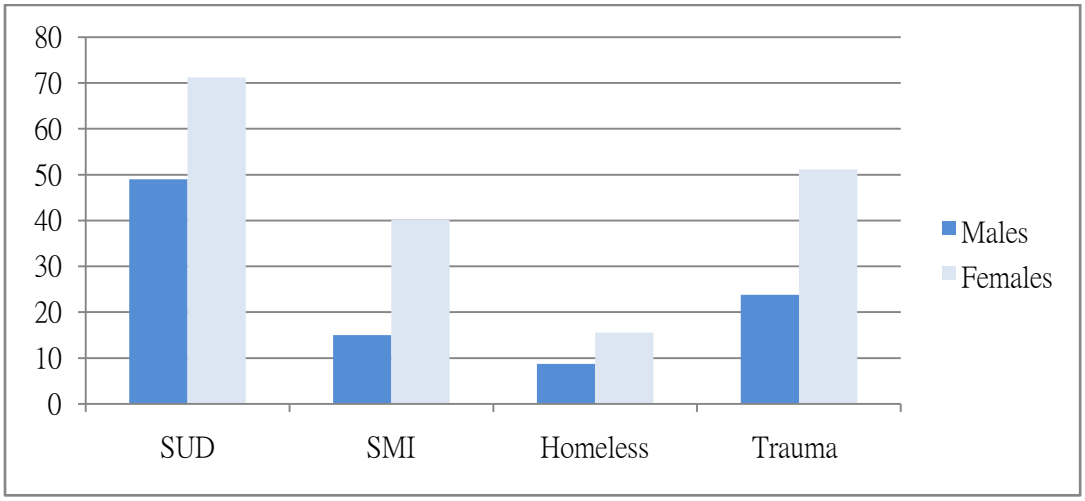
Below in Figure 7.2, a comparison of the male and female participants within the jail demonstrates some remarkable differences in need for treatment and intervention. Although 56% of the entire sample had symptoms indicating a drug and/or alcohol dependence, females were much more likely to have a SUD than were males (71%, compared to 49%). Although the rate of dependence found among men in the Wayne County Jail sample mirrors the national arrestee data (see ADAM above).

Certainly, profiles of those arrested may differ from those booked into jail, but earlier ADAM datasets that included women from Detroit, also indicated higher rates of problem drug use among women arrested in Detroit than occurred in other metropolitan areas (ADAM/DUF, 1998). These figures indicate a significant need for treatment and intervention related to substance use/misuse in Wayne County among males, and particularly, females.

"…the likelihood of co-occurring mental health and substance use disorders (COD) was significantly greater among females than males"
(27% versus 9%; chi sq = 39.7 (1); p >.001.)

Correlates of use/misuse that may affect both recovery and recidivism are also displayed in our comparison of males and females booked into the Wayne County Jail (Figure 7.2, below). Mental health disorders, particularly those co-occurring with SUD, have been associated with both relapse and recidivism in Wayne County (Kubiak, Zeoli, Hanna & Essenmacher, 2011). Among those in the Wayne County, 23% of the jail population reported symptoms associated with a serious mental illness, but females were much more likely to report these symptoms than were their male counterparts (40% versus 15%).

Figure 7.2 Comparison of Males and Females Booked into to the Wayne County Jail




Other correlates that have been found to influence successful outcomes are the presence or absence of homelessness (measured here as pre-incarceration) and a recent physical or sexual trauma (measured here as within the 12 months preceding incarceration within the jail). Figure 7.2, above illustrates that females are more likely than males to experience both homelessness and a traumatic event.

"…over half of the females (56%) had two or more issues to contend with after their discharge, compared to 23% of males."

Perhaps most relevant to interventions is the discussion of multiple need and/or multiple morbidities, in other words the cumulative effects of more than one issue or problem at the same time. Considering the four problem domains identified above (SUD, SMI, homelessness and trauma exposure), Table 7.3 below illustrates the frequency of problem domains for the entire sample, also differentiated by gender. For example, 32% of the sample reported no problem or issue among the four; however, the lack of issues was more prevalent among males, compared to females (40% versus 13%).

Table 7.3 Number of Problem Domains* Indentified Among Males and Females Booked into the Wayne County Jail

| Problem Domains* | Total sample | Men (68.1%) | Women (31.9%) |
|---|---|---|---|
| 0 domains | 31.8% | 40.4% | 13.4% |
| 1 domain | 34.9% | 37.1% | 30.3% |
| 2 domains | 20.6% | 15.6% | 31.2% |
| 3 domains | 10.6% | 6.3% | 19.9% |
| 4 domains | 2.1% | 0.6% | 5.2% |

*Problem Domains include SUD, SMI, Homelessness and Trauma History

## Substance Abuse Treatment Resources within the Wayne County Jail

Within the Wayne County Jail there is a residential substance abuse treatment program operated by a local community provider that is contracted by the Wayne County Office of Child and Family Services. On average, there are 220 beds within the jail set aside for residential programming (a total of 80,300 jail bed-days each year) and utilization is 95% of capacity. Treatment staff within the residential program use a criminal justice risk/need instrument (COMPAS) to develop the treatment plan. This treatment plan follows the individual through services within the jail, as well as into community placements.

After residential treatment ends, step-down, or continuing care is provided through a contract between Wayne County Office of Child and Family Services and SEMCA. These step-down services focus on relapse prevention and case management and can be delivered within the jail, using a group format or, within the community, in probation residential/day reporting centers. SEMCA subcontracts with Black Family Development to fulfill the terms of this contract. Mental Health Court participants and women are special populations served under this contract. These outpatient services can last up to 3 months, linking individuals with services and resources in the community, such as housing, education/training, transportation and psychiatric services.

As stated previously, screening and assessment of substance-use disorders upon entry into the jail, although ideal, is not completed. In fact, several individuals enter the jail already assigned to treatment by the courts without formal assessment. In 2011, 911 offenders were sentenced to Jail Plus upon entry into the jail and 100 people were released from jail and sent to Residential/Day Reporting programs. All of these offenders met criteria for PA511, meaning that they were felony offenders who fell within specific sentencing guidelines (e.g. between 18 and 48 months) who could be diverted from state prison. Therefore, many of the jail occupants (an estimated 30%) were arrested for misdemeanor offenses and were not eligible for substance abuse treatment services. Jail personnel worked with SEMCA and DBSA to arrange community-based treatment for approximately 50 of these individuals during 2011 (Note: information provided by jail

Central Diagnostic Unit administrator, Rod Pitts).

Over the last few years, jail admissions have been declining, due to fewer arrests, but if we use a figure of 40,000 bookings last year and our figure of 56% with a substance use dependency (see study results above), approximately 22,400 of the individuals would require intervention. Based on the jail figures above, 1011 individuals received the Jail Plus and/or Residential/Day Reporting Services (supported by SEMCA), approximately 5% of those booked into the jail with a substance use dependency.

## Monroe County Jail

The Monroe County Jail is much smaller than the Wayne County Jail, with a capacity for 343 individuals at any point in time. Total admissions for 2010 were 7,950, and a spokesperson from the jail predicts that the numbers will be similar for 2011. Although most individuals serve 30 days or less, of the nearly 8,000 admissions in 2010, the breakdown, by charged offense, is as follows: 22% felonies; 42% misdemeanors; 3% civil infractions; and 33% federal offenses.

The jail spokesperson confirmed that there was no standardized instrument used to screen for alcohol or drug misuse, but said there are three questions that are answered as part of the booking process that indicate use/misuse. They are: 1) Does the inmate appear to be under the influence of alcohol or drugs? 2) Does the inmate use alcohol? 3) Does the inmate use drugs? Officials from Monroe did not have any figures on drug/alcohol involvement of those admitted to the jail and were unaware of any reports that could be run from their management information system that would provide such data.

Prior to trial, a probation officer prepares a pre-sentence investigation (PSI) report in which the officer assesses history as well as current use of substances. If the probation officer determines that it is warranted, he/she will refer the individual to treatment within the jail. In addition to the probation officer, an individual can be referred to treatment by the Judge, Office of Community Corrections' staff, Defense Attorney, Prosecutor or someone from the Sheriff's Department.

Once an individual is referred, a therapist from Salvation Army Harbor Light (SAHL) conducts an assessment to determine if the person is eligible for one of several programs within the jail (e.g. Relapse Prevention,(RAP), Cognitive Behavior). Across all of the jail programs there were a total of 124 individuals served in 2011; 139 in 2010 and 135 in 2009. Eligibility criteria include:

1) Offenders must be facing a minimum of 60 days in jail
2) Meet diagnostic criteria for a substance use disorder, as defined in the DSM IV
3) Mental state does not affect the individual's ability to understand materials/participate
4) Not combative or present a physical danger to self or others

In addition to these criteria, those selected for RAP have to be employed or attending school full time. While other programs are conducted primarily in the jail, during incarceration, RAP is intended to bridge jail and community experiences, by offering an alternative to incarceration. Those ordered to SAHL's RAP program (funded by SEMCA) are in a residential setting within the community and return to employment or school, attending three therapeutic groups per week for a minimum of six months. In 2010/2011 there were 77 individuals ordered to attend RAP. (Note: Information on Monroe was provided by Chad Zeunen from the Monroe County Jail and Renee Shaw from SAHL-Monroe).

## Prison Population

> "62% of prison inmates within Michigan prisons demonstrated a substance dependency, while an additional 11% met criteria for a diagnosis of abuse" (Kubiak, Boyd, Slayden & Young, 2001, 2002).

MDOC supervises approximately 130,000 individuals convicted of a felony offense with various forms of sanctions (probation, prison, parole and tether). Although a person on probation or a tether may never have been incarcerated within a state prison, those on parole are reentering the community directly from prison. The majority of individuals incarcerated within the state prison (n=44,000) or returning to the community on parole status come from Wayne County (as high as 40%). However, it is difficult to determine the specific number of individuals returning to out-Wayne and Monroe Counties due to the aggregate or multi-county output from MDOC.

Regardless of geographic location, the majority of prisoners within the state system have a substance use disorder. Similar to the information from the jail, incarcerated women have a higher prevalence of substance use disorders than do their male counterparts. In fact, of the prisoners classified as having the most severe substance use disorders, 15% were men and 19% were women. Since 2001 every person entering the Michigan prison system is screened and assessed for substance abuse treatment needs, initially with the Substance Abuse Subtle Screening Inventory ( SASSI) and then in a one-to-one assessment.

During incarceration, many individuals receive substance abuse education and/or treatment prior to release on parole. In fact, if individuals have a recommendation for substance abuse treatment, they are often required to fulfill that requirement prior to parole. Treatment within the institutional setting involves either an 'outpatient' model, consisting of two group sessions per week for 10 weeks, or an intensive residential experience referred to as RSAT (Residential Substance Abuse Treatment). RSAT is available for both male and female prisoners in Michigan. It is housed in a dedicated treatment unit and takes approximately six months to complete. MDOC has demonstrated favorable outcomes with substance abuse treatment within the prison, particularly the RSAT (See Kubiak, Boyd, Young & Slayden, 2001, 2002).

Once released from prison, persons on parole who were required to have treatment within the facility are also required to have treatment within the community. MDOC has procured an array of treatment providers

across the state that have contracts to provide treatment to individuals on parole (See table 7.14 in this chapter for a list of providers in Wayne and Monroe Counties with which MDOC contracts).

## Section 7.2 Problem Identification and Treatment

There is a high correlation between substance use/misuse and criminal behavior, with as many as one third of all treatment referrals in the U.S. coming from the criminal justice system (U.S. Department of Health and Human Services, 2006).

For example, it may be that a person on district court probation may be referred to a SEMCA for treatment by that court. If the person meets eligibility criteria, SEMCA will likely refer them to a SEMCA-funded agency for treatment. Similarly, it is possible that an individual returning to Wayne County after incarceration in the state prison will be referred by their parole agent to an agency within Wayne County that is funded through MDOC Substance Abuse Services. These clients may never interface with SEMCA.

This section examines two methods of problem identification and subsequent treatment that are common within the SEMCA region for individuals involved in the criminal justice system. The first method is through the specialty courts across Wayne County (note: Monroe does not have any drug courts). Individuals come to the attention of the courts when they have violated a criminal statute related to alcohol impairment and/or use or possession of illegal drugs. In some instances, the crime may not be for use or possession, but it is determined that the offense was related to substance use.

The second method of identification and treatment is referral to SEMCA for treatment by professionals from criminal/legal institutions (i.e. probation/parole officers). To more fully understand the needs of criminally-involved clients seeking substance abuse treatment we used data from SEMCA management information system files to determine the similarities and differences between clients with and without criminal histories and/or referrals. We begin with a discussion of the drug courts before moving on to the SEMCA data.

### Examination of Specialty Courts

> "As discussed above, the individual's relationship to the criminal justice system and interface in treatment and intervention is based upon the particular phase of the criminal justice continuum and the resources available."

Drug Courts, Sobriety Courts and Mental Health Courts were developed with a mission to reduce criminal behavior related to substance use or co-occurring mental health and substance use disorders. Specialty courts integrate treatment services with criminal justice case processing and have a mission to promote recovery through a coordinated response to offenders who are dependent upon alcohol and other drugs. The use of an integrated team approach requires cooperation and collaboration among judges, prosecutors, defense counsel, probation and

community treatment agencies (See Bureau of Justice Assistance; 2004: Key Components of Drug Courts).

## Wayne County Drug Courts

Within Wayne County there are several Drug and Sobriety Courts. These specialty courts differ based on population of focus (e.g. youth versus adult; drugs versus alcohol problem); size (i.e. number of individuals served); and organizational configuration (i.e. probation officer as case manager or case manager external to criminal justice). This section explores various aspects of the drug courts in Wayne County, using multiple sources of information. These sources of information include the State Court Administrator Office's (SCAO) database, interviews with stakeholders at each of the courts, interviews with participants and a review of SEMCA data.

At the time of this report, there were seven active specialty courts focused on misuse of drugs and alcohol serving SEMCA clients that were actively entering data into the SCAO database; two at the circuit court level (one juvenile and one adult) and the remaining five at the district court level (See Table 7.4 below). Excluded from this review is the one mental health court that began at the circuit court level in Wayne County in 2009 and has served approximately 150 clients through September 30, 2011. Although a large portion of the population served by the Mental Health Court are thought to have co-occurring substance use disorders, further assessment of the court is excluded from this report and may be found in other evaluations of the Mental Health Court available from Detroit/Wayne County Community Mental Health.

Table 7.4 Numbers of participants served in Drug Courts from State Court Administrators (SCAO) and SEMCA databases

| Court Name/ ID# | SCAO Totals Clients Served | SCAO SEMCA area residents only* | SCAO % SEMCA residents in Drug Ct | SEMCA Data – Drug Ct Client Totals | % of Total Drug Ct Clients Served by SEMCA | % of Drug Ct Participants that are SEMCA area residents served through SEMCA |
|---|---|---|---|---|---|---|
| Wayne Co 3rd Circuit, Juvenile (1) | 167 | 79 | 47% | 13 | 8% | 16% |
| Wayne Co 3rd Circuit, Adult (2) | 309 | 140 | 45% | 29 | 9% | 21% |
| Dearborn, 19th District (18) | 99 | 70 | 70% | 43 | 43% | 61% |
| Taylor, 23rd District (23) | 79 | 77 | 97% | 71 | 90% | 92% |
| Plymouth, 35th District | 65 | 54 | 83% | 13 | 20% | 24% |

| Court Name/ ID# | SCAO Totals Clients Served | SCAO SEMCA area residents only* | SCAO % SEMCA residents in Drug Ct | SEMCA Data – Drug Ct Client Totals | % of Total Drug Ct Clients Served by SEMCA | % of Drug Ct Participants that are SEMCA area residents served through SEMCA |
|---|---|---|---|---|---|---|
| (26) | | | | | | |
| Livonia, 16th District; Sobriety (92) | 84 | 77 | 92% | 26 | 30% | 34% |
| Woodhaven, 33rd District; DWI (110) | 60 | 56 | 93% | 24 | 40% | 43% |

*Excludes those from Detroit and other counties, leaving those in out-Wayne and Monroe zip codes.

"64% of those participating in these seven courts reside within the SEMCA catchment area" (Note: Only 9 of the participants come from Monroe County).

A review of the SCAO data found that, between January 2008 and March 2011, a total of 863 participants were served by these seven drug courts. However, in reviewing zip codes many were identified as Detroit residents (n=243) or living in other regions outside of out-Wayne and Monroe Counties (n=67), leaving a total of 553 individuals who reside within the SEMCA region and are served by one of these drug courts.

"As the data illustrates, SEMCA funding accounts for between 8% and 90% of drug court participants, dependent upon the court."

Table 7.4, above, describes the number of individuals served within the Drug/Sobriety Courts in the SEMCA region, using two sources of data: 1) State Court Administrators (SCAO) data and 2) SEMCA's Care Net database. SCAO data is entered by court personnel as an individual undergoes eligibility screening for drug court involvement. SEMCA data is entered by those working for SEMCA or one of their contracted providers and is collected upon screening and assessment for treatment services. The first column in Table 7.4 provides the total number of clients served found within the SCAO database between 2008 and 2011. However, as noted above, several of these participants have zip codes that indicate Detroit residency or residency in counties outside of Wayne or Monroe Counties. Thus, the second column excludes these individuals and provides the number of individuals involved in the various drug courts that are likely living within the SEMCA region. Similarly, column three portrays the percent of clients served by the court that are within SEMCA funding region.

The last three columns of Table 7.4 above use SEMCA treatment data to illuminate the involvement of SEMCA and associated providers with drug court participants. Data from SEMCA's management information system indicate the number of individuals served by each of the drug courts over the past three years (column four). Column five illustrates the proportion of total clients served by the drug court that were funded by SEMCA, based on total clients served (e.g. Wayne Juvenile Drug Court: 13/167 = 8% of the total clients received SEMCA funded treatment). In column six we assess SEMCA involvement, using only SEMCA eligible clients (Wayne Co. Juvenile Drug Court: 13/79 = 16% of SEMCA eligible clients received treatment from SEMCA provider).

Using the SCAO data, we reviewed demographic characteristics of those that entered these seven drug courts. The average age for screening into the drug courts is 28.7 (SD 11.5) with a range from 13 to 70. Primary drugs of choice are alcohol (38%) or marijuana (25%) and the majority of those participating have been charged with a misdemeanor offense (62%) followed by felonies (35%) and status offenses (2.5%). The mean ASAM score was 2.7, with half of the participants scoring above 2.0 and the other half-scoring below 2.0. An overview of participant demographics by individual court is displayed in Table 7.5.

Table 7.5 Drug Court Participant Characteristics by Court (SCAO data w/o DTW Residents)

| Characteristic | COURT NAME | | | | | | |
|---|---|---|---|---|---|---|---|
| | Wayne Co Juv N=90 | Wayne Co Adult N=166 | Dearborn N=77 | Taylor N=78 | Plymouth N=64 | Livonia N=92 | Woodhaven N=110 |
| Age at Screening | | | | | | | |
| M(SD) | 15.4 (1.0) | 32.7 (10.3) | 28.5 (10.9) | 30.6 (9.6) | 35.3 (12.3) | 28.0 (11.6) | 31.6 (10.2) |
| Range | 13-17 | 18-67 | 17-59 | 17-55 | 20-70 | 17-70 | 18-52 |
| Male | 90% | 78% | 56% | 73% | 70% | 61% | 76% |
| Ethnicity | | | | | | | |
| African American | 37% | 26% | 10% | 8% | 6% | 1% | 5% |
| Caucasian | 57% | 67% | 86% | 91% | 89% | 96% | 93% |
| Other | 6% | 7% | 4% | 1% | 5% | 3% | 2% |
| Married* | 1% | 15% | 4% | 18% | 19% | 7% | 17% |
| Education: | | | | | | | |
| % less than high school | 100% | 34% | 33% | 22% | 3% | 21% | 5% |
| High School or GED | | 45% | 30% | 49% | 38% | 45% | 32% |
| Some college or trade | | 17% | 34% | 28% | 47% | 23% | 50% |
| College (4yr) Completion + | | 4% | 3% | 1% | 13% | 11% | 12% |
| Mental Health History | 8% | 25% | 40% | 28% | 33% | 36% | 12% |
| Previous Substance Abuse TX | 0 | 55% | 58% | 49% | 56% | 66% | 58% |
| ASAM Level of Care | | | | | | | |
| M (SD) | 2.8 (0.7) | 2.8 (1.0) | 2.8 (0.8) | 2.3 (0.6) | 2.5 (0.6) | 2.7 (0.7) | 2.6 (0.8) |
| Drug of Choice | | | | | | | |
| Alcohol | 6% | 5% | 21% | 69% | 89% | 42% | 90% |
| Marijuana | 94% | 22% | 23% | 13% | 3% | 8% | 5% |
| Heroin | 0 | 13% | 25% | 0 | 0 | 36% | 0 |
| Cocaine/Crack | 0 | 15% | 20% | 1% | 0 | 2% | 0 |
| Opiate/Sedative/Benz | 0 | 6% | 11% | 10% | 8% | 6% | 5% |
| Poly User | 0 | 34% | 1% | 3% | 0 | 4% | 0 |
| History of IV Drug Use | 0 | 18% | 31% | 5% | 3% | 36% | 3% |
| Current IV Drug User | 2% | 15% | 14% | 1% | 0 | 24% | 2% |
| Drug Court Failure – Yes | 44% | 32% | 42% | 22% | 17% | 41% | 15% |
| Missing** | 0 | 2% | 3% | 3% | 3% | 4% | 0 |

*only 'partnered' variable

**Need to clarify if missing data here are individuals currently enrolled in the court

In reviewing the drug of choice data, a more refined analysis was conducted to determine if age was related to specific drug of choice in any particular court (See Table 7.6 below; note drug of choice table). For all courts, with the exception of the juvenile court, the age categories of 17 – 24 and 25 and older were used. In several courts, the overwhelming majority of participants were those 25 years and older (i.e. Wayne 75%; Plymouth 81% and Woodhaven 71%), somewhat skewing the relationship between age and drug of choice. For example, in the Wayne County Circuit Drug Court, all of the drugs of choice are more frequently mentioned by the older age group, compared to the 17-24 year old age group. Although results are similar in Plymouth and Woodhaven, in these two courts the younger person's predominant drug of choice is alcohol. Courts that have a more equitable distribution by age categories show interesting findings. In Dearborn, younger offenders were the majority of those identifying marijuana as drug of choice, while older offenders were more likely to identify cocaine. In Taylor, younger offenders were more likely to use other drugs (e.g., opiates, benzodiazepines, sedatives/hypnotics), and older offenders more likely to use alcohol. Interestingly, in Livonia younger offenders were in the majority of those citing marijuana, heroin, other drugs and poly drug use, while older adults were more likely to identify alcohol.

Table 7.6 Drug of Choice of SEMCA Residents Involved in Drug Court by Age Group and Court

| Court | Drug of Choice | | | | | |
|---|---|---|---|---|---|---|
| | Alcohol | Marijuana | Heroin | Coc/Crack | Other Drugs* | Poly Drug User |
| Wayne Co Juvenile (N=79) | n=4 | n=75 | n=0 | n=0 | n=0 | n=0 |
| 13 – 16 (n=76) | 75% | 97% | | | | |
| 17 and above (n=3) | 25% | 3% | | | | |
| Wayne Co Adult (N=140) | n=8 | n=29 | n=15 | n=22 | n=16 | n=50 |
| 17-24 (n=34) | 13% | 38% | 20% | 0% | 12% | 34% |
| 25 and older (n=106) | 87% | 62% | 80% | 100% | 88% | 66% |
| Dearborn (N=70) | n=15 | n=16 | n=17 | n=14 | n=7 | n=1 |
| 17-24 (n=36) | 53% | 94% | 41% | 14% | 43% | 100% |
| 25 and older (n=34) | 47% | 6% | 59% | 86% | 57% | 0% |
| Taylor (N=77) | n=54 | n=9 | n=2 | n=1 | n=8 | n=2 |
| 17-24 (n=24) | 20% | 44% | 50% | 100% | 63% | 50% |
| 25 and older (n=53) | 80% | 56% | 50% | 0% | 37% | 50% |
| Plymouth (N=54) | n=47 | n=2 | n=0 | n=0 | n=5 | n=0 |
| 17-24 (n=10) | 17% | 100% | | | 0% | |
| 25 and older (n=44) | 83% | 0% | | | 100% | |
| Livonia (N=77) | n=32 | n=7 | n=27 | n=2 | n=6 | n=3 |
| 17-24 (n=43) | 37% | 86% | 70% | 0% | 67% | 67% |
| 25 and older (n=34) | 63% | 14% | 30% | 100% | 33% | 33% |
| Woodhaven (N=56) | n=50 | n=3 | n=0 | n=0 | n=3 | n=0 |

| Court | Drug of Choice | | | | | |
|---|---|---|---|---|---|---|
| | Alcohol | Marijuana | Heroin | Coc/Crack | Other Drugs* | Poly Drug User |
| 17-24 (n=16) | 26% | 100% | | | 0% | |
| 25 and older (n=40) | 74% | 0% | | | 100% | |
| **Total by Drug and % of Drug Court Clients** | **n=200 37%** | **n=141 26%** | **n=61 11%** | **n=39 7%** | **n=45 8%** | **n=56 10%** |

*Other drugs include opiates, benzodiazepine, sedative/hypnotics, etc. Note: Juvenile court includes different age categories, since participants' ages range from 13 – 17.

Overall, alcohol was the most widely named drug of choice across all drug courts (37% of all participants) with marijuana the next most cited drug (26%). All other categories were in a similar range across drug courts, but varied greatly by individual court.

In assessing data from SCAO and what can be interpreted about drug courts, it is important to remember that, although the SCAO data has multiple fields on the participants' activities during and after drug court, many of these fields are not populated. This is because SCAO only requires 67 fields to be completed from the courts. This means that remaining fields in the database may not be used by all of the courts, and as a result, may not be valid, due to a high proportion of missing data. However, we provide some information based on the required fields across all of the courts.

At the time of data collection, 42% (n=232) of the 553 participants from the SEMCA region were actively enrolled in drug court and the remaining 321 (58%) had been discharged. Of those discharged, 38% (n=122) successfully completed, 56% (n=179) were terminated unsuccessfully and 6% (n=20) were discharged for other reasons (i.e. death, voluntary termination). Of those that were unsuccessful, the most common reason was 'non-compliance' – however 14 (8%) were discharged due to a new offense. It is important to remember that these outcomes represent success in terms of completion of drug court, not necessarily in terms of completion of substance abuse treatment. Drug courts are generally structured with multiple phases and objectives for the individual to meet during each phase.

Reviewing the demographic table generated by the SCAO data, the discharge data by court deserves consideration. Successful completion rates among SEMCA residents vary by court from a low of 26% to a high of 61%. In addition, the reasons for an unsuccessful discharge status may illuminate strategies for improving outcomes. For example, in those courts in which there are high rates of absconders – in other words those that are 'no shows' or on bench warrant status – there may be a need to pay closer attention to the initial engagement phase of treatment. For those with high non-compliance rates, enhancing skills in motivational interviewing may improve the court's ability to work with clients labeled as non-compliant, as these individuals may be in earlier 'stages of change.'

## Drug Court Stakeholder Interviews

We interviewed drug court managers, who were identified in concert with SCAO and SEMCA administrators. These managers were court employees whose primary function involved managing the drug courts. Of the courts listed above, only one chose not to participate in the interview process. In Table 7.7 information comparing court characteristics are illustrated. There is wide variety among courts in terms of the number of years in operation (2 – 11) and the number of participants served (110 – 1500). One of the interesting differences among courts was the substance abuse screening process for court entry. While a few used standardized assessments or screening resources of the coordinating agency, many used a probation officer assessment. It is unclear if the probation officers have been trained in substance misuse/abuse assessments or, in some instances, if they are using a standardized screening tool.

Table 7.7 Drug Court Characteristics by Court (Source: Stakeholder Interviews) (Note: *Southgate disbanded their court in late fall of 2010)

| Characteristic | COURT NAME | | | | | | |
|---|---|---|---|---|---|---|---|
| | Wayne Co Juvenile | Wayne Co Adult Circuit Ct. | Dearborn 19th District | Taylor 23rd District | Plymouth 35th District | Livonia 16th District | Southgate 28th District |
| Year Established | 2000 | 2003 | 2002 | 2004 | 2004 | 2007/2009 | 2004 |
| Type of Court | Juvenile Drug | Adult Drug | Adult Drug | Adult Drug | Sobriety/Juv | Drug/Sobriety | Adult Drug |
| Number of Clients Served Since Inception | 300-500 | 700 | 400-500 | 164 | 110 | 1400-1500 | 1000 |
| Number of new participants in past 30 days | 7 | 8 | 5 | 5 | 3 | 30-40 | 0* |
| Case Managers Utilized | YES | YES | NO | YES | NO | NO | NO |
| Case Managers=Probation Officers | YES | Sometimes | YES | YES | YES | YES | YES |
| Caseload of Case Managers | 46-60 | 30 | 35-40 | 40-45 | N/A | 12-15 | n/a |
| Substance Abuse Assessment Performed by: | Clinician; standardized tools (SASSI/GAIN) | SEMCA/DBSA | Based upon related conviction or Probation Screen | Probation Officer | Probation Officer | Clinician at licensed agency | Probation Officer |
| Drug Testing | YES | YES | YES | YES | YES | YES | YES |
| Frequency of Drug Tests | 2x/week | 2x/ week | Determined by Probation Officer | 2-5x/week | Each ct appt | Daily | Daily |

Queries posed to stakeholders were primarily focused on their access to substance abuse treatment services funded by SEMCA and other issues or concerns that they are currently facing. Table 7.8 (below) provides a summary of respondent comments by subject area. These responses are aggregated and are only presented if mentioned by more than one drug court manager.

Table 7.8 Drug Court Stakeholder Views on Treatment Access and Other Issues

| Issue | Responses |
|---|---|
| Access to Treatment | All respondents believed that access to treatment for indigent clients was very good to excellent. A couple respondents believed that the formation of the drug court improved access. |
| Treatment Providers | While some courts work with one or two providers (or have on-site clinicians), some courts work with a multitude of providers. Many said that providers were chosen based on the transportation needs of the participant.<br><br>In addition, the role of the treatment provider can be very collaborative (e.g. part of the court team) or very distant (e.g. verbal or written reports only). In this area, it was apparent that the level of involvement of the treatment provider impacted the stakeholders' perceptions. In some courts, stakeholders discussed how valued the treatment provider is to the team, making treatment decisions and reporting directly to the team. In other courts, stakeholders felt they had to 'track down' treatment staff for reports and that staff turnover at provider agencies made this more difficult and was the reason treatment staff did not enter data into SCAO. |
| Treatment Funding | Multiple issues were raised in relation to funding of treatment:<br>**Privately insured:** Stakeholders described a gap in treatment for those with private insurance, due to the limited coverage for substance abuse treatment. Stakeholders described that 20-50% of their participants have private insurance that may not cover what the judge orders and they are ineligible for SEMCA-supported treatment. Some suggested a 'supplement' when private benefits are exhausted.<br>**Discrepancy between order and authorization**: In many cases the judge will order a higher level of treatment than is authorized by SEMCA. Some courts have worked creatively with SEMCA around these issues, but most are perplexed by how to navigate this issue. One stakeholder was frustrated, saying that the only way a person could get into residential treatment is by 'using' during drug court involvement.<br>**Perception of decreasing funds**: Similarly, stakeholders perceive less resources in general for treatment, citing decreased days for residential treatment this year, |

| Issue | Responses |
|---|---|
| | compared to last, less funding for residential than outpatient, and limits on residential days.<br>**Ancillary Needs**: Many stakeholders described the lack of funds to address ancillary needs e.g., mental health treatment, transportation, identification. They pointed out that some "ancillary" needs, such as having a valid ID, are in fact essential to eligibility for services. (See next section for more detailed discussion.)<br>**Sustainability**: Long term sustainability of the specialty court was a concern for some of the stakeholders |
| Other Issues/ Concerns | **Co-Occurring Disorders**: Stakeholders described one-third of their participants having mental health disorders and that obtaining medication and lengthy wait times for psychiatrists were major problems. The majority of stakeholders identified this issue, saying that it is no better for those with private insurance ('meds are provided, but no therapy').<br>**Transportation**: Many of the drug court clients have had their licenses suspended or revoked, making transportation to treatment, which is a drug court mandate, a major issue.<br>**Prescription Drug Misuse/Abuse**: Misuse or abuse of prescription drugs was cited as a significant problem by multiple courts, particularly in regards to youth who are "experimenting". One stakeholder also described misuse of prescription meds among those with co-occurring disorders.<br>**Identification:** The lack of legal documentation of identity and residency, a concern brought up by multiple courts (discussed above), effects eligibility determination for treatment. |

## Drug Court Participant Interviews

We interviewed participants of the Taylor drug court, which by far had more SEMCA-funded participants (92%) than any other drug court. Ten participants volunteered for the interviews after research team members presented the needs assessment project and its purpose to two different groups of participants during a drug-court session. We explained that the researchers were not affiliated with the drug court and were working on a project about related treatment. All volunteers were compensated for their time with a $20 gift card.

> "It is important to know that ALL of the interviewees had been 'in trouble with the law' prior to the incident that led to their drug-court involvement."

*Participant Profiles:* A typical drug court participant representing the group interviewed would be a white male, 38 years of age, with a high school education, be employed part-time with an income of less than $15,000 per year, and not currently in a committed relationship.

Table 7.9 below summarizes the demographic characteristics of those interviewed. Since this is a convenience sample of volunteers, it is not clear how representative these participants are, compared to other participants within this particular drug court, or across the other drug courts in Wayne County.

Table 7.9 Demographic Characteristics of Interviewees from Drug Court

| Demographic Characteristic | Mean or % |
|---|---|
| Age | Mean 38.8 (SD 8.5)<br>Range 27-55 |
| Gender | |
| Male | 60% |
| Female | 40% |
| Race | |
| White | 80% |
| Black | 20% |
| Education | |
| Less than High School | 10% |
| High School/GED | 60% |
| Some College | 20% |
| College Degree | 10% |
| Relationship Status | |
| Committed Relationship | 30% |
| Formerly Partnered | 40% |
| Single/never partnered | 30% |
| Employment Status | |
| Part-time | 50% |
| Full-time | 30% |
| Unemployed-looking | 10% |
| Unemployed-not looking | 10% |
| Income | |
| Less than $15K | 50% |
| $16-25K | 10% |
| $26 – 50K | 20% |
| Missing | 20% |

*Treatment experiences of participants*: The average time that the interviewees had spent involved in drug court was 13.4 months, (SD 6.8) with a range between 4 and 24 months. The majority of participants (70%) were in treatment at the time of the interview and 90% had been in treatment prior to drug court. Although one participant had a treatment experience that was one month prior, all others were at least 2

years prior, with an average of 83 months before drug court admission.

When participants were asked to rate the involvement of drugs or alcohol in their current offense on a scale of 1 (none) to 10 (a great deal), there seemed to be consensus on the relationship between the two: average for the group was 9.8 (SD 0.6), with a range of 8 – 10. The majority of participants (90%) were familiar with SEMCA's 1-800 referral line. There was a balanced distribution among referral sources such as family, religious, etc., but more equivocal agreement on courts (90%), health fairs (0%), website (0%) or workplace (0%). Overall, participants rated their experience in drug court positively (Mean of 4.1 (SD 1.0) on a 5-point scale). Similarly, they were positive about the quality of care they received in their treatment programs (Mean 7.1 (SD 1.9) on a 9-point scale).

*Participant Voices*: In an effort to illuminate the participant voices we provide vignettes of four representative interviews. Because the mean length of stay in drug court among the participants is 13 months, we chose interviews that were representative of those newer to the court (i.e. 6 months), those near the mean (12 and 15 months) and one who was near completion (24 months). In choosing various time frames we hope to provide insight into differing perspectives and their relationship to length of time in the program. For example, we found that those with the least amount of time in the drug court rated the drug court below the mean of 4.1.

We also took care to choose cases in which opinions varied about their court and/or treatment experiences

### Newer Clients in the Drug Court

*T004: LOS=Six-months. T004 had been enrolled in the drug court for six months at the time of interview. She opted to enroll in drug court after being arrested for her third DUI. She rated her drug court experience as 'okay' ('3' on a 1 to 5 scale). She said that getting connected with treatment at Community Care Services has been the most helpful part of her drug court experience because she was able to talk with others. An issue that concerned her about drug court was breach of confidentiality i.e., that therapists reveal to the judge information that has been discussed in therapy sessions. Prior to her drug court experience, she had been in treatment for substance abuse two times, but reported not thinking that she really needed help. At the time of interview she was receiving intensive outpatient care at Community Care Services, whose quality of care she rated 'low' ('2' on a 1 to 5 scale) and said the program has been 'somewhat helpful' ('3') in providing help to meet her recovery goals. She found that being drug tested was a helpful part of treatment because it "keeps people on their toes," but was upset to discover one of her own tests came back positive after she reported not having used.*

*T008: LOS=Six-months. T008 stated that he used alcohol as a way of forgetting his problems, but had never been in treatment prior to this incident. He was sentenced to drug court for driving under the influence of alcohol. At the time of interview he had been in drug court for six months. He stated that*

*he "was driving under the influence of alcohol, not drunk" and that he was not told the truth about what drug court entailed. He rated his overall drug court experience 'negative' ('2'). He was unhappy about the costs and being forced into sharing personal information with drug court staff who "hold your future in their hands." He was unhappy with the name 'drug court' and suggested that it be called something more positive and less stigmatizing. On the other hand, he reported that the best thing about drug court was that it helped to provide structure and a focus on his goals. T008 rated the quality of his substance abuse treatment experience as 'high' ('4'), stating that counseling, meeting new people, hearing other people's stories, and having access to resources were all helpful. He rated the program as 'somewhat helpful ('3') in helping to meet his recovery goals.*

## Midway in Drug Court Experience

*T002: LOS=12 Months. T002 has been using drugs and alcohol since his early teens. As far as a drug of choice, he reported, "There's not much I didn't do." he reported getting "in a lot of trouble" with the law during his teenage years. In recent years, he thought he was doing better because of reducing his usage solely to pills, but last year he was in a car accident while under the influence of three Somas and "a bunch of others [pills]." He was arrested for being under the influence of a controlled substance, and his court-appointed attorney recommended that he enter drug court. At the time of his interview, twelve months into the program, he rated his drug court experience as 'positive' ('4' on a scale of 1 to 5). He stated that all of the people including the probation officer, counselor, and other drug court participants have been the best thing about being in drug court because they have helped him think about things differently. In addition, he stated that fear of going to jail was a motivator to stay sober. The one thing that he found least helpful was that "they lump everyone together" and do not give participants the benefit of the doubt, although he acknowledged that they have to do so "to a certain extent."*

*T002 had been in treatment for substance abuse two prior times. Regarding the quality of substance abuse treatment that he currently receives at Community Care Services as part of the drug court program, he rated it 'high' ('4' on a 1 to 5 scale), and said that it was been 'very helpful' ('4' on a 1 to 5 scale) in providing help to meet his recovery goals.*

*T009: LOS=15-months. T009 reported using drugs on a daily basis for a few years before being arrested for possession, which resulted in her entering drug court. She had three prior arrests for retail fraud, in which she was stealing to obtain money for drugs. She had entered substance abuse treatment on four occasions prior to drug court, but relapsed because of issues with homelessness and her "mental state." After 15 months in drug court, she rated her experience as 'positive' ('4'), reporting that it "keeps me sober," although she found that fulfilling the requirements of drug court as a working individual was challenging. T009 rated the quality of care in her substance abuse treatment as 'average' ('3') and reported that attending intensive outpatient sessions was a helpful part of her recovery, as it*

*kept her busy and kept her mind off her addiction. She reported that the program was 'very helpful' ('4') in helping her to meet her recovery goals. She suggested that people in the community could be "more sympathetic" as a way of providing suppo*rt to people in recovery.

### Completing Drug Court

*T003: LOS=24 months. At the time of interview T003 had just graduated from the drug court program, which lasts 24 months. He reported that his addiction to Xanax and Vicodin had become so severe that he had to take 16 or 17 pills every morning "just to get out of bed." He reported 4 prior arrests for breaking and entering, all of which he committed "stoned on Xanax." His final arrest occurred after drinking a fifth of vodka and taking 15 Xanax bars and "going on a rampage… breaking out someone's car window." His lawyer offered him the option of drug court instead of five years in prison.*

T003 r*ated his experience in drug court as 'very positive' ('5'), stating that "they give you the tools to succeed" and "They actually care, whether you realize it or not." He cited the drug court's probation officer, the handouts distributed, and being connected with CCS as the most helpful aspects of being enrolled in drug court. He found that paying "a lot of money" to drug court was the least helpful. T003 had never been in treatment for substance abuse before entering drug court. He reported that when he started treatment he thought "it was a joke at first…It took a month or so to change my attitude." He rated the quality of treatment as 'very high' ('5') and said it was 'very helpful' ('4') in providing help in meeting his recovery goals. He reported that all of his current needs had been met through treatment and that he planned to continue receiving outpatient services at CCS.*

In summary, both stakeholders and participants see value in the specialty courts.

### Monroe County Specialty Courts

There were no drug courts located within Monroe County in the SCAO database. Further investigation found that there was a juvenile drug court within Monroe until March of 2011 (last admission was April 2010). This court began in 2002 with a grant from the U.S. Department of Justice to 38th Judicial Circuit Court's Family Division. After three years of external funding, the court was supported through county funding, but fiscal shortfalls resulted in a reduction of the court's professional staff, which prevented on-going operation.

Although the court is no longer in operation, it is useful to examine the operation of the court, as well as demographic characteristics of those involved. Operationally, the court worked closely with the treatment community. Monroe Salvation Army Harbor Light (SAHL) was an original collaborator on the grant and provided a clinical supervisor who recommended treatment approaches and trained staff. This clinical supervisor was also a member of the Drug Court Team. In addition, SAHL provided a therapist who

worked with the juveniles and their families as well as a staff person who conducted assessments. In 2009 the court moved to personal service contracts, eliminating the role of SAHL.

Between 2002 and 2010, 139 youth were admitted into the program. Average age at admission was 15.3 years, with the average age of first drug use at 14.97 and alcohol use at 15.98. The majority of those admitted were male (72%), Caucasian (93%) and without a history of mental health treatment (56%). The primary drug of choice among those admitted was marijuana (79%) followed by alcohol (15%). (NOTE: Data for this section supplied by Michael James, Administrator of Youth Services, 38th Circuit Court).

## Section 7.3 Criminally Involved Clients Found in SEMCA Data

"SEMCA data reveals that 44% of all SEMCA clients in the study period were involved in the criminal justice system at the time of treatment admission."

SEMCA data also reveals that 38% of all clients in the study period were on probation and/or parole, 6% were involved with the courts, and 0.2% were incarcerated at the time of treatment. Interestingly, only 3% of SEMCA (n=271) clients were involved in drug court, with the largest proportion of those being on probation or parole status (87%).

Table 7.10, below, provides a comparison of demographic characteristics of SEMCA clients, with and without criminal justice histories. In addition, it groups clients by the type of current criminal justice involvement at the time of treatment admission. As alluded to above, dependent upon where an individual is in the criminal justice continuum, treatment approaches and engagement may differ. For this reason we categorized groups of individuals that are currently court involved (e.g. specialty court, pre-conviction), those on probation and/or parole (e.g. convicted and currently serving part of their sentence) and those incarcerated. The group of incarcerated individuals is small (n=20) and may be an anomaly in the data.

"Monroe County has a higher proportion of criminal justice-involved clients than Wayne County (50% versus 44%)."

In examining the table below, we look for proportions that vary greatly from the 'total' population to provide clues to the service needs of a particular group. For example, although males make up the largest proportion of SEMCA clients, the proportion of males on probation/parole and incarcerated is higher than the population as a whole. Similarly, the offender population is largely white – greater than the proportion of the entire SEMCA database.

Interestingly, those with criminal-justice involvement are more likely to be employed either full- or part-time than the SEMCA service population in general. The proportion of those in full- or part-time positions was 27% and 28% respectively for those court involved or on probation/parole, as compared to 13% for those with no criminal justice involvement. This could be due to court-related employment mandates, with

the threat of "violation" motivating employment.

In addition, those with criminal justice involvement were less likely to have mental health issues than those without criminal justice involvement; 56% of those with no criminal justice involvement had a moderate or severe mental health status as compared to 46% of those court involved and 40% of those on probation/parole. The same pattern is illustrated when assessing severe mental health issues.

Table 7.10 Comparing Characteristics of Criminal Justice- Involved/Non-Involved from SEMCA Data.

| Demographic Characteristic | Total Population N=9,106 | Criminal Justice Involvement | | | | Sig. |
|---|---|---|---|---|---|---|
| | | NONE n=4922 | Court n=519 | Probation/ Parole n=3328 | Incarcerated n=20 | |
| Gender | | | | | | |
| Male | 61.8% | 56.9 | 59.7 | 69.0 | 65.0 | <0.0001 |
| Female | 38.2% | 43.1 | 40.3 | 31.0 | 35.0 | |
| Race | | | | | | |
| White | 76.2% | 72.4 | 85.9 | 80.1 | 85.0 | <0.0001 |
| Black | 18.6% | 23.0 | 8.6 | 13.9 | 5.0 | |
| Other | 5.2% | 4.6 | 5.5 | 6.1 | 10.0 | |
| Age | 32 (median) Range 12-69 | 36.1 | 31.6 | 30.7 | 31.3 | p<0.0001 1 vs. 2 1 vs. 3 |
| Education | | | | | | |
| <= 8th grade | 4.6% | 4.7 | 4.0 | 4.0 | 5.0 | <0.01 |
| 9-11th grade | 30.8% | 29.4 | 27.2 | 31.9 | 40.0 | |
| 12th grade | 41.9% | 41.8 | 42.8 | 43.4 | 45.0 | |
| >12 - <16 years | 19.2% | 20.1 | 22.0 | 18.0 | 10.0 | |
| 16+ (BS/BA/Grad) | 3.5% | 4.0 | 4.0 | 2.6 | 0.0 | |
| Employment | | | | | | |
| Full-time | 7.4% | 4.7 | 9.4 | 11.3 | 0.0 | <0.0001 |
| Part-time | 11.9% | 7.8 | 17.9 | 17.0 | 0.0 | |
| Unemployed | 66.1% | 69.9 | 60.9 | 61.3 | 80.0 | |
| Not in labor force | 13.0% | 15.8 | 10.4 | 9.2 | 20.0 | |
| N/A | 1.6% | 1.9 | 1.4 | 1.2 | 0.0 | |
| Drug Court (Admissions Record) | | | | | | |
| Yes | 3.0% | 0.4 | 2.3 | 6.9 | 5.0 | <0.0001 |
| No | 97.0% | 99.6 | 97.7 | 93.1 | 95.0 | |
| Mental Health Status* | | | | | | |
| None | 50.6% | 44.3 | 53.6 | 59.6 | 55.0 | <0.0001 |

| Demographic Characteristic | Total Population N=9,106 | Criminal Justice Involvement | | | | Sig. |
|---|---|---|---|---|---|---|
| | | NONE n=4922 | Court n=519 | Probation/ Parole n=3328 | Incarcerated n=20 | |
| Mild/Moderate | 45.1% | 50.6 | 42.6 | 37.4 | 40.0 | |
| High | 4.2% | 5.1 | 3.8 | 3.0 | 5.0 | |
| High Severity Mental Health | | | | | | |
| Yes | 9.4% | 11.5 | 5.5 | 6.9 | 10.0 | <0.0001 |
| No | 90.6% | 88.5 | 94.5 | 93.1 | 90.0 | |
| # Arrests past 5 years | | | | | | |
| 0 | 32.0% | 53.3 | 6.4 | 5.5 | 15.0 | <0.0001 |
| 1 | 28.0% | 22.1 | 40.5 | 35.1 | 25.0 | |
| 2 | 17.8% | 10.9 | 23.5 | 26.8 | 20.0 | |
| 3 | 9.4% | 5.8 | 13.3 | 14.2 | 10.0 | |
| 4+ | 12.8% | 8.0 | 16.4 | 18.5 | 30.0 | |

* All based on first admission unless otherwise stated

In Table 7.11 (below) we examine drug of choice and treatment variables by group membership. In terms of drug of choice, it appears that those involved in the criminal justice system are more likely to cite alcohol as their drug of choice (53% of court involved and 47% of probation/parole) than those who are not criminal justice-involved (40%). Perhaps most interesting is that those that are not involved in the criminal justice system are far more likely to be involved with illegal substances than those in engaged in the criminal justice system (i.e., opiates are the primary drug for 41% of those not involved in criminal justice, compared with 21% of those court involved and 18% of those on probation/parole). Certainly this is an issue of prevention that could be addressed more fully by SEMCA providers.

Examining treatment variables, based upon the admission episodes, rather than unique client data, we found that there is a statistically significant difference between the number of treatment episodes between those with no criminal justice involvement (1.33 episodes during examination period) and those on probation/parole (1.29), indicating a lower number of treatment episodes for those with this particular criminal justice status. Similarly, those without criminal justice involvement have a greater number of treatment admissions than those involved. Interestingly, we also find higher rates of treatment completion for clients involved in the criminal justice system, compared to those who are not, which is likely related to mandated treatment.

Table 7.11 Treatment indicators for those with and without Criminal Justice Involvement

| Substance Use and Treatment Indicators | Total Population N=9,106 | Criminal Justice Involvement | | | | Sig |
|---|---|---|---|---|---|---|
| | | NONE n=4922 | Court n=519 | Probation/ Parole n=3328 | Incarcerated n=20 | |
| Primary Substance (from assessment) | | | | | | |
| Alcohol | 39.6% | 33.8 | 53.0 | 47.0 | 35.0 | <0.0001 |
| Cocaine | 12.4% | 13.8 | 8.0 | 10.5 | 15.0 | |
| Cannabis | 15.1% | 8.3 | 16.4 | 22.9 | 10.0 | |
| Opiates | 30.6% | 41.3 | 21.1 | 17.6 | 40.0 | |
| Other | 2.5% | 2.8 | 1.6 | 2.1 | 0.0 | |
| **TREATMENT VARIABLES** | | | | | | |
| Treatment Episodes | M=1.29 | 1.33 | 1.28 | 1.26 | 1.30 | <0.001 none vs. probation |
| Treatment Admissions | M=1.95 | 2.15 | 1.86 | 1.72 | 2.15 | <0.0001 none vs. (court & probation) |
| Discharge Status of First Episode | | | | | | |
| - Completed Tx | 29.6% | 22.7 | 32.4 | 38.1 | 10.0 | <0.0001 |
| - Left | 39.3% | 43.9 | 35.4 | 34.1 | 25.0 | |
| - Continue | 14.2% | 17.1 | 11.0 | 10.9 | 35.0 | |
| - Other | 16.9% | 16.2 | 21.2 | 16.9 | 30.0 | |

A similar examination of characteristics was undertaken to examine characteristics of clients involved in drug court, compared to those with other types of criminal-justice involvement and those without any involvement (See Table 7.12 below). We found that those involved in drug courts are more likely to be male, white and younger than either those with other types of criminal justice involvement or those without any criminal-justice involvement. Moreover, those involved in drug court are much more likely to be employed either full- or part-time, (37%) compared to those with other criminal justice involvement (27%) or no involvement (12%). In addition, those involved in drug courts are less likely to have mental health issues and have lower rates of treatment admissions than the other groups. Drug-court-involved clients also have the highest rate of treatment completion, (49%) compared to those with other criminal justice involvement (37%) and those without (23%).

Table 7.12 Characteristics of Drug Court Participants Compared to others w/without Criminal Justice Involvement (SEMCA data)

| Demographic Characteristic | Total Population N=9,106 | Drug Court/Criminal Justice Involvement | | | |
|---|---|---|---|---|---|
| | | Drug Court Involvement n=271 | No Drug Court Involvement, Criminal Justice Involvement n=3625 | No Drug Court, No Criminal Justice Involvement n=4902 | Sig. |
| Gender | | | | | |
| Male | 61.8% | 70.1 | 67.5 | 57.0 | <0.0001 |
| Female | 38.2% | 29.9 | 32.5 | 43.0 | |
| Race | | | | | |
| White | 76.2% | 83.0 | 80.6 | 72.4 | <0.0001 |
| Black | 18.6% | 8.9 | 13.5 | 23.0 | |
| Other | 5.2% | 8.1 | 5.9 | 4.6 | |
| Age | 32 (median)<br>Range 12-69 | 28.5 | 31.6 | 36.1 | p<0.0001<br>1 vs. 2<br>1 vs. 3 |
| Education | | | | | |
| <= 8th grade | 4.6% | 3.3 | 4.0 | 4.7 | <0.05 |
| 9-11th grade | 30.8% | 31.7 | 31.4 | 29.4 | |
| 12th grade | 41.9% | 45.8 | 43.1 | 41.8 | |
| >12 - <16 years | 19.2% | 16.6 | 18.6 | 20.1 | |
| 16+ (BS/BA/Grad) | 3.5% | 2.6 | 2.8 | 4.0 | |
| Employment | | | | | |
| Full-time | 7.4% | 19.9 | 10.4 | 4.6 | <0.0001 |
| Part-time | 11.9% | 17.3 | 17.1 | 7.7 | |
| Unemployed | 66.1% | 53.5 | 61.7 | 70.0 | |
| Not in labor force | 13.0% | 7.8 | 9.6 | 15.8 | |
| N/A | 1.6% | 1.5 | 1.2 | 1.9 | |
| Mental Health Status* | | | | | |
| None | 50.6% | 66.8 | 58.3 | 44.1 | <0.0001 |
| Mild/Moderate | 45.1% | 32.1 | 38.4 | 50.7 | |
| High | 4.2% | 1.1 | 3.3 | 5.2 | |
| High Severity Mental Health | | | | | |
| Yes | 9.4% | 4.8 | 6.9 | 11.5 | <0.0001 |
| No | 90.6% | 95.2 | 93.1 | 88.5 | |
| # Arrests past 5 years | | | | | |
| 0 | 32.0% | 3.3 | 5.9 | 53.4 | <0.0001 |
| 1 | 28.0% | 30.3 | 36.2 | 22.0 | |

| Demographic Characteristic | Total Population N=9,106 | Drug Court/Criminal Justice Involvement | | | |
|---|---|---|---|---|---|
| | | Drug Court Involvement n=271 | No Drug Court Involvement, Criminal Justice Involvement n=3625 | No Drug Court, No Criminal Justice Involvement n=4902 | Sig. |
| 2 | 17.8% | 333 | 25.7 | 10.8 | |
| 3 | 9.4% | 16.2 | 13.8 | 5.8 | |
| 4+ | 12.8% | 17.0 | 18.4 | 8.0 | |
| Primary Substance (from assessment) | | | | | <0.0001 |
| Alcohol | 39.6% | 49.1 | 47.5 | 33.8 | |
| Cocaine | 12.4% | 5.6 | 10.6 | 13.8 | |
| Cannabis | 15.1% | 34.9 | 21.1 | 8.1 | |
| Opiates | 30.6% | 8.9 | 18.8 | 41.5 | |
| Other | 2.5% | 1.5 | 2.1 | 2.8 | |
| **TREATMENT VARIABLES** | | | | | |
| Treatment Episodes | M=1.29 | 1.15 | 1.27 | 1.33 | <0.0001 all pairs |
| Treatment Admissions | M=1.95 | 1.38 | 1.77 | 2.15 | <0.0001 all pairs |
| Discharge Status of First Episode | | | | | |
| - Completed Tx | 29.6% | 48.7 | 36.6 | 22.6 | <0.0001 |
| - Left | 39.3% | 26.2 | 34.7 | 44.0 | |
| - Continue (??) | 14.2% | 8.9 | 11.2 | 17.2 | |
| - Other | 16.9% | 16.2 | 17.6 | 16.2 | |

*All based on first admission unless otherwise stated

The above tables suggest that the involvement in the criminal justice system is a powerful motive for treatment completion. Moreover, and perhaps surprisingly, those with criminal justice involvement are more likely to possess strengths such as employment and lack of mental health issues than other SEMCA clients. Although this does not necessarily reflect national data on those with criminal justice involvement, it may be an artifact of Michigan's treatment funding, which comes from criminal justice sources, such as community corrections and MDOC. Perhaps available funding from these sources has resulted in those with criminal justice involvement less apt to appear in the SEMCA data, thus altering what might be seen if all criminal justice involved clients were receiving services through the Coordinating Agencies. Below we explore the alternative resources available within Wayne and Monroe Counties that are funded through a criminal justice entity.

## Section 7.4 Resources for Substance Abuse Treatment, Other than SEMCA, Specific to Criminal Justice-Involved Clients

### Wayne County Child and Family Services Supported Treatment within Wayne County

In addition to the resources available through SEMCA, other local and state departments put forth funding for substance abuse treatment, specifically for offender populations. In Wayne County, the Office of Child and Family Services, Division of Community Corrections has an extensive network for jail and community-based treatment, as well as relapse prevention services (See Table 7.13). As stated above, eligibility criteria for all of these services include that the client has to meet PA511 guidelines (i.e. felony conviction, sentencing guidelines within a specific range). Referrals are accepted directly from the courts, MDOC or the Office of the Wayne County Sheriff. Treatment agencies have contracts with Office of Child and Family Services and bill directly to them for services rendered. Although SEMCA is listed as a provider for those with co-occurring mental health and substance abuse disorders in out-Wayne County, it is also true that probation status does not exclude someone from receiving services by other SEMCA-funded providers. It is unclear how these resources are co-mingled and how many of these providers are also funded by SEMCA.

Table 7.13 Substance Abuse Treatment funded by Community Corrections: Wayne County

| Provider Agency | Type of Service Provided | | | |
|---|---|---|---|---|
| | Probation Residential | Day Reporting/ Case Management | Relapse Prevention/ Case Management | Jail Based |
| Detroit Rescue Mission | X | | | |
| Elmhurst | X | | | X |
| Gateway Detention | X (Male only) | | | |
| Heartline | X (Female only) | | | |
| Operation Get Down | X | X (Female only) | | |
| Salvation Army | X | | | |
| Sobriety | X (Male only) | | | |
| Phoenix Center | | X (Male only) | | |
| Detroit Recovery Project | | | X | |
| NSO | | | X (Co-occurring Disorders-COD) | |
| SEMCA | | | X (COD) | |
| ETRS-PAGE | | | | X |
| ETRS- Drunk Driving | | | | X |

Note: All services intended for both males and females unless otherwise indicated.

## MDOC Supported Treatment in Wayne and Monroe Counties

Similar to county-funded substance abuse treatment for individuals with substance use disorders, the state, through the MDOC, also provides treatment resources to those reintegrating into the community from prison.

Outpatient services, paid for through MDOC, have been traditionally structured around cognitive behavioral approaches to criminal thinking and conduct and integrated with substance abuse treatment and relapse prevention. To refer an offender to treatment, a MDOC Agent contacts a selected agency and identifies the referral as one from the Department of Corrections. As funds permit, an outpatient agency is expected to begin treatment within five to ten working days of the referral. The outpatient agency will screen or assess the applicant for the extent of the substance problem, level of needed service, and the appropriate provider for service.

Residential treatment providers are mandated to deliver 40 hours of therapeutic content weekly. Referrals to residential treatment must be made through the gate-keeper at the MDOC state level for admission, length of stay authorizations, and discharges. Some residential providers are capable of a wide range of level of care options including substance abuse detox, medical monitoring and treatment of pregnant women (i.e. Salvation Army Harbor Light in both Wayne and Monroe Counties; SHAR).

### Table 7.14 Substance Abuse Treatment in Wayne and Monroe County Funded by MDOC

| Provider | Outpatient | Residential | City |
|---|---|---|---|
| Apex Behavioral | X | | Westland<br>Brownstown<br>Detroit |
| Catholic Social Services | X | | Detroit<br>Grosse Pointe<br>Dearborn Hts. |
| Community Care Services | X | | Lincoln Park<br>Bellville |
| Detroit Rescue Mission | | X | Detroit |
| Elmhurst | X | X | Detroit |
| Heartline | | X (female only) | Detroit |
| Metropolitan Counseling | X | | Detroit |
| Operation Get Down | X | X | Detroit |
| SHAR | | X | Detroit |
| Salvation Army Harbor Light | X | X | Detroit and Monroe |
| Sobriety House | | X | Detroit |

## Summary and Recommendations

Based on the data derived from multiple sources, there are several recommendations for improving services and service access to those with substance use disorders who are involved in the criminal justice system. Thinking about the criminal justice system as a continuum from arrest to arraignment, sentencing and finally incarceration (in local jail or state prison), the recommendations are as follows:

### Increase capacity for, and make more frequent use of, drug court as an option

As demonstrated in the preceding tables, those who were assigned to drug court had better completion outcomes as compared to those who were not involved in drug court – irrespective of their criminal justice status. In other words, those involved in drug court had fewer treatment admissions, fewer treatment episodes and were much more likely to complete treatment than those under other forms of criminal justice supervision (e.g. probation/parole) or those without any criminal justice supervision. This is even more remarkable when you consider the drug court participants are much more likely to be younger and male than those in the other two groups. Fewer admissions and episodes of treatment provide evidence of cost effectiveness within the SEMCA system of care.

### Examine differences between drug courts to assess most efficient and effective methods

Reviewing the demographic table generated by the SCAO data, the discharge data by court deserves consideration. Successful completion rates among SEMCA residents vary by court from a low of 26% to a high of 61%. In addition, the reasons for an unsuccessful discharge status may illuminate strategies for improving outcomes. For example, in those courts in which there are high rates of absconders – in other words those that are 'no shows' or on bench warrant status – there may be more attention needed in the initial engagement phase of treatment. For those with high non-compliance rates, perhaps enhancing skills in motivational interviewing may improve the courts ability to work with clients labeled as non-compliant as they may be in earlier 'stages of change' categories. In addition, when considering the drug court structure, there may be differences based on the various models of drug court that have been implemented around the region. For example, some courts utilize probation officer as case manager versus separate case manager. Moreover, the mechanism for how the treatment community is represented on the drug court team (e.g., active member or referral mechanism) should also be assessed in terms of outcomes.

### Training on and screening for prescription drug misuse

Many drug court stakeholders identified the use of prescriptions drugs among those in drug court as an emerging issue. Although it seems that this information is gathered through self-report, it may be useful to train court personnel on screening methods for the off-label and/or misuse of prescription medications as a routine practice. If so identified, brief interventions could be initiated that may prevent and/or decrease

misuse.

### Require more fields be completed in the SCAO data for more detailed analyses

While the database maintained by SCAO is very useful statewide in reviewing participants' admission and discharge into drug courts, there is little required data about the course of treatment. Therefore, it is difficult to know how much or what type of treatment someone received and if that treatment was successfully completed. Because the SCAO database was de-identified, there was no mechanism for linking the data with the SEMCA data to look at treatment outcomes more specifically and if those treatment outcomes were related to court completion and/or other successful outcomes. Perhaps future studies will provide a mechanism for linking these data sources together to be able to definitively track recidivism as well as treatment engagement post drug court participation.

### Attention to co-occurring disorders among those enrolled in drug court

Many of the participants and stakeholders in the drug court arena discussed the issue of co-occurring disorders among participants and the lack of available mental health services in the community. Many spoke of the difficulty getting mental health providers engaged, particularly if the individual did not meet criteria for severe and persistently mentally ill. Stakeholders said this was an issue irrespective of the participant's insurance status. Perhaps the influence of SEMCA might draw mental health providers to the drug courts or influence more mental health courts around the region that are skilled in treatment of co-occurring disorders.

### Increase resources for or access to ancillary services such as transportation, obtaining identification, and employment

Participants as well as administrative stakeholders discussed the need for ancillary services to ensure that those in need of treatment were able to attain it and those that were in or had completed treatment had the necessary services to support recovery. Transportation was the issue that was most mentioned – in particular by drug court stakeholders who spoke of participants' suspended license and the alienation of family members and other support systems. Identification was also mentioned as a problem that often precluded treatment involvement as participants' could not prove their eligibility based on residence.

### Examine reasons for lower rates of mental health disorders among those with criminal justice involvement

It is curious that mental health problems were less frequent among those with criminal justice involvement compared to those without as much of the literature in the field would differ. This could be because both probation and parole are represented in the data (e.g. differences in the jail versus prison population), or it could be that those with criminal justice involvement are going to particular provider agencies. Is the

screening and assessment the same? Are professionals trained similarly?

### Lack of services for those with misdemeanor offenses in the jail

Most of the substance abuse services available for those who are booked into the county jail are for those that meet more severe sentencing guidelines (e.g. felony offenders). However, many individuals entering the jail have less serious offenses that may be related more directly to their abuse/misuse of drugs and/or alcohol. It may be a secondary or tertiary prevention strategy to engage these individuals in treatment to ward off against future criminality and more serious drug use. Perhaps this speaks to expansion of drug court at the district court levels or specifically within 36th District. It could also mean that there is information available to the jail staff – as well as those conducting the arraignments – of resources for substance abuse treatment. Utilization of the external motivation provided by the criminal justice involvement at this level might reinforce more pro-social behavior and prevent more serious drug/alcohol related offenses in the future.

### Disconnect between need and the available services for those in or released from jail

Although SEMCA is involved in drug court, mental health court and additional services for those that are in the Wayne County Jail, the disconnect between those in need of services and those that receive services within the jail, is quite wide. This analysis does not tell us how many of the individuals that were jailed eventually obtained substance abuse treatment services upon release from jail, irrespective of their involvement in them during jail, but clearly there is great need. Encouraging the jail to engage in routine screening may help prioritize and allocate treatment services. This is especially important given that SEMCA, Detroit Bureau of Substance Abuse and the Wayne County Office of Child and Family Services allocate treatment resources to this population. Working collaboratively with the jail, the three entities may be able to create a plan for more efficient use of scarce resources.

### Special emphasis on the needs of women involved in the criminal justice system

Women involved in the criminal justice system are more likely to have mental health disorders, experiences of trauma and substance use disorders than their male counterparts. Moreover, they are much more likely to have multiple problem areas, including sole provider of minor children or pregnancy/post partum issues. Understanding the propensity for these multiple problems needs to be apparent in the services provided by SEMCA, including the training provided to drug and mental health court staff. Gender specific and trauma informed services should traverse the provider agencies and include personnel who work in this area.

# Chapter 8: Prescription Drug Abuse

## Introduction

Prescription drug misuse can be defined as the use of prescription medications in a manner not prescribed and/or by someone for whom the medication was not prescribed (MDCH, 2010). According to the National Institute of Drug Abuse (NIDA), the most commonly misused/abused prescription medications are opioids – pain medications; depressants/sedatives – for anxiety and sleep; and stimulants – for ADHD, obesity and narcolepsy. The Substance Abuse and Mental Health Services Administration (SAMHSA) estimates that 16.42 million adults (>18 y/o) in the United States abused prescription drugs in 2010, representing greater prevalence than heroin, methamphetamines, cocaine, and other illicit drugs. For the purpose of this chapter we have used the term drug to include legal substances produced by the pharmaceutical industry.

Admissions for substance abuse treatment tripled between 2003 and 2006, and prescription drug abuse accounts for almost 10% of those in treatment (SAMHSA, 2006). Pain-reliever abuse, alone, increased five-fold between 1998 and 2008, to account for 8.8% of those seeking treatment for the first time. Attitudes toward prescription drug use reflect today's social norm of sharing prescriptions, advertising campaigns, and the practice of self-medicating; all encourage the misuse and abuse of prescription medications. Michigan is one of fifteen states in the nation that ranks prescription drug overdose as the second leading cause of death – only behind automobile crashes (Akre, 2009).

According to data collected through the Michigan Automated Prescription System (MAPS), the number of prescriptions for some medications increased more than 200% between 2003 and 2006. Because of the sheer volume of prescriptions written, these controlled medications are accessible for even minor medical conditions. Hydrocodone (e.g., Vicodin®) accounts for 29.2% of all Schedule III prescriptions nationwide and 29.9% in Michigan. In 2009, there were 4,472 treatment admissions in Michigan for prescription drug abuse and the highest rates of abuse were in adults aged 21-54 years of age. Michigan exceeds the national average (2.3%) of non-medical stimulant use at 3.2%. The trend of increased volume of drugs is seen across all classes of drugs discussed in this chapter.

National trends indicate that youth aged 15 to 24 have more access to prescription drugs now than in the past and 40% of teens believe that prescription drugs are "safer than other drugs" and that less stigma and

shame are attached to the use of these drugs (SAMHSA, 2008). There is a concern among substance abuse treatment providers that prescription drugs are the "new gateway drug" and could lead to the use of illegal and illicit drugs. With these alarming trends, efforts to identify and treat prescription drug abuse is of great concern to policy makers, clinicians, and others.

A needs assessment for the SEMCA region is not only timely, but necessary, to garner in- depth information regarding the misuse of prescription medications from those on the front line: pharmacists. This chapter specifically addresses the observations, perceptions and experiences of pharmacists in out-Wayne County and Monroe County (See Appendix A for discussion of survey methodology). In addition, it incorporates data collected through key informant interviews, phone interviews, and other methodologies (See Appendix A for description).

Data collection for prescription drug use and abuse at the state level is fragmented and a relatively new area of consideration. The problem of prescription drug abuse has steadily grown nationwide in the last decade and is of increasing concern in the state of Michigan. Local data on the use and misuse of prescription medications are particularly limited (MDCH, 2010). Therefore, the lack of collection of data regarding prescription drug use at the local level represents an information gap that this needs assessment will begin to address.

## Section 8.1 Defining the Problem

Identifying prescription drug abuse in both adults and youth is challenging for many reasons. First, most teens and their parents believe that prescription medications are safer and more acceptable than illicit drugs because they are prescribed by a physician (MCDH, 2010). Children may grow up in a home where prescription drugs are used or abused regularly, thus normalizing their use. Second, the prescribing of medications to treat even minor problems has become the norm and is expected behavior. For example, a teenager using prescribed Vicodin® for two weeks following dental procedure is not unusual or alarming to most parents – thus normalizing and minimizing the seriousness of using prescription drugs for appropriate reasons. Finally, because prescription drug abuse is evident in all communities and is not limited by socio-economic status, age, race or ethnic groups, pharmacists are challenged to separate those with legitimate needs from those who are misusing or abusing prescription drugs.

The practice of [over] prescribing pain medications has led to an increase in the misuse and possible abuse of these same drugs for pain in all populations and age groups (MCDH, 2010). The problem of prescription drug abuse is not isolated in the young population. In fact, it is estimated by SAMHSA (2005) that as many as 17% of older adults (ages 45 to 65) may be abusing prescription drugs as well. The population of adults over 65 accounted for 13% of the population in 2005, but was prescribed over one-third of all prescriptions written. Because the prescribing of drugs to older adults is also normative and

expected behavior, this potentially leads to unintentional drug abuse and misuse as the physician is trusted to prescribe drugs only as needed (SAMHSA, 2005).

With 90% of the population reporting having seen an advertisement for prescription drugs, it is not surprising that the informed consumer is more accepting of prescription drug use now than in the past. Demand from patients has led to an increase in prescriptions nationwide. In Michigan, the physician's office is the primary access point for prescription drugs, according to MAPS data in 2009. Additionally, the number of physicians prescribing drugs outside of their specialty is also on the rise – which again may be attributed to advertising that normalizes prescription drug use.

One method used by patients to acquire multiple prescriptions for the same drug is referred to as "doctor shopping". Pharmacists are aware of this as a possible indicator of misuse or abuse. The MAPS system enables pharmacists to identify prescription trends and be alerted to the potential for abuse. The internet has enabled a potentially dangerous means for youth (and adults) to get drugs without a prescription or any oversight and monitoring. These trends have contributed to the ease of access to prescription drugs and potential misuse and abuse.

## Perceptions of Prescription Drug Abuse

In order to determine pharmacist perspectives and understanding of prescription drug abuse, it is useful to gather information on their perceptions/attitudes about the abuse/misuse of substances other than those prescribed by a physician and filled by the pharmacist. Pharmacists have a professional responsibility as healthcare providers to do what they can to prevent the abuse and diversion of prescription drugs (DEA, 2010). To accomplish this, pharmacists are trained to recognize common patient behaviors and characteristics that indicate the possibility of diversion, misuse, and/or abuse of prescription drugs. The survey administered was intentionally designed to elicit the perceptions of pharmacists who live and/or work in the SEMCA service area on various substance abuse, misuse, and addiction issues.

Substance abuse is defined specifically in behavioral terms by the DSM-IV. While pharmacists seldom knowingly deal directly with substance abuse among their patients, the fact that they dispense prescription drugs that are sought by potential substance abusers places them in a position to detect, limit access to and possibly intervene in such behavior. Their community work enables pharmacists to observe patterns of prescribing, along with patient behaviors that raise suspicions about substance abuse. This survey sought to examine behavioral intentions of pharmacists in the way they execute discretion to prevent diversion and abuse of controlled pharmaceutical substances (DEA, 2010).

In order to frame pharmacist behaviors and practices, we first inquired about their perceptions of substance abuse, specifically regarding the seriousness and severity of legal, illegal, and controlled substances. As illustrated in Table 8.1, an overwhelming majority of pharmacists believe that abuse of prescription drugs is "very serious."

Table 8.1 Severity and Seriousness of Substance Abuse (N=372)

| Drug | Not at all serious/Not too serious | Somewhat serious | Very serious |
|---|---|---|---|
| Alcohol Abuse (N=327) | 4% | 27.5% | 68.5% |
| Illicit drugs (N=327) | 3.7% | 14.1% | 68.5% |
| Prescriptions drugs (N=372) | .6% | 13% | 86.2% |
| OTC drugs (N=324) | 15.4% | 50.6% | 34% |
| Opioid drugs (N=326) | 1.5% | 13.5% | 85% |

Pharmacist perceptions of opioid drugs are virtually identical to their perceptions of prescription drugs as a whole. It is important to note that this survey item did not differentiate between prescription opioids and illicit opioid drugs. Thus, respondents answered the question based on how they interpreted the term "opioid drugs". Regardless, a vast majority of respondents reported that the abuse of opioid drugs is very serious, while two-thirds of them also ranked abuse of alcohol and illicit drugs as very serious (See Table 8-1).

Of particular interest is the lower ranking of the seriousness of OTC drug abuse. The pharmacists that participated in this survey are aware that Michigan law requires that certain OTC drugs are kept behind the counter because they (e.g., pseudoephedrine) can be used to synthesize illicit drugs, such as methamphetamine (DEA, 2010). Nonetheless, respondents ranked this drug category lowest for seriousness of abuse. Their response may have been influenced by a common practice today to keep most of these "OTC" drugs behind the counter or behind-the-counter (BTC). Because this question did not differentiate between OTC and BTC, it is possible that many of these pharmacists referenced their perceptions solely regarding traditional OTC drugs.

## Perceptions of Over-the-Counter Drugs

Pharmacists were specifically asked to share their observations and perceptions about the ways in which they encounter people who abuse OTC/BTC drugs. Because pharmacists often work in an environment in which they interact with consumers and observe behavior in regards to OTC drugs, they were asked to share their perceptions regarding OTC drugs.

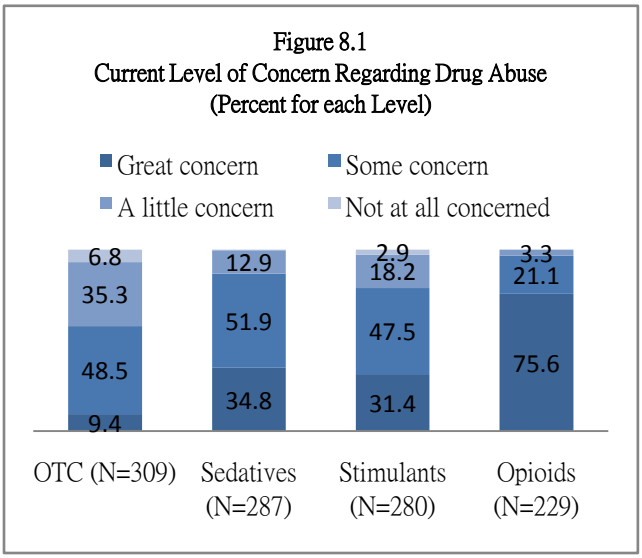
Table 8.2 OTC Issues Encountered (N=287)

| Issue Encountered | Never | Monthly; 2-3 times a month | Weekly; 1-2 times a week; Daily |
|---|---|---|---|
| Excessive quantity purchased (N=287) | 55.4% | 35.9% | 8.7% |
| Inappropriate drug for the patient condition (N=285) | 35.4% | 52.6% | 12% |

However, as seen in Table 8.2, 55.4% of pharmacists never encounter the purchase of an excessive quantity of OTC drugs. This could be attributed to the fact that they are actually BTC drugs and their sale is strictly monitored. A similar proportion (52.6%) of pharmacists report observing that OTC drugs--inappropriate for their patients' conditions--are purchased on at least a monthly basis. Pharmacists feel that the potential for misuse/abuse of OTC drugs is especially high for teenagers (See Table 8.3).

Table 8.3 Age Group Most Likely To Abuse OTC Drugs (N=284)

| Seriousness of, Concerns for, and Potential for Prescription Drug Abuse | |
|---|---|
| Teenagers (13 to18) | 61.3% |
| Young adults (19 to 24) | 25% |
| Adults (25-45) | 7.7% |
| Older adults (46-64) | 2.5% |
| Pre-teens (to age 12) | 1.8% |
| Seniors (65 and older) | 1.8% |



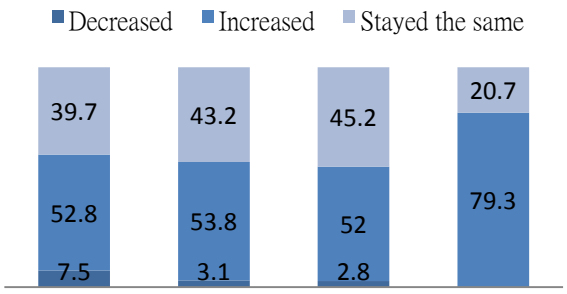

Teens and their parents often do not see prescription drugs as being "as serious" as illicit street drugs – and are perceived "safe" for use – even if contraindicated or not for a specific condition. For example, the use of Benadryl to aid sleep versus allergy symptoms is a common practice.

Pharmacists in this survey expressed the greatest trepidation for the use of opioids, followed by sedatives, stimulants, and OTC drugs (See Figure 8.1). One key informant said "...if it slows you down or speeds you up, then those are potential

problems." Substance abuse providers in the SEMCA region are now acknowledging prescription drug abuse as a serious and growing problem. In addition to surveying pharmacists, we interviewed a number of key informants involved in policy-making, law enforcement, service provision, and health services to gain a sense of community perceptions regarding prescription drug use, abuse, and/or diversion.

Pharmacists indicated that their level of concern has increased for all types of drugs in the last three years, with opioids at the top of their list (See Figure 8.2). Key informants in law enforcement noted that prescription drugs are being abused by teenagers and have been found on juveniles who were arrested for marijuana or other illicit drug possession. As a result some school districts in the SEMCA region have a police officer at the high school working in the role of School Resource Officer (SRO). A SRO works proactively to prevent illegal activity – including drug use – in the schools by patrolling hallways and parking lots, as well as working with school personnel. While SROs are "still hearing" there is "a lot of drug use" by juveniles – they are "just not bringing it into the school." This has resulted in less activity in the school itself, but SROs find that there is still concern for illicit and prescription drug use off school grounds. Law enforcement officers reported that identifying the misuse of prescription drugs is challenging because they are legal and widely used. This trend was also noted by pharmacists in terms of increased numbers of prescriptions being written.

Figure 8.2
Level of concern regarding drug abuse over the last 3 years




Pharmacists indicated they feel opioids now have the highest potential for abuse (See Table 8.4). According to these pharmacists, opioid abuse potential is followed by prescription drugs, amphetamines, cocaine, heroin, alcohol, tobacco, and marijuana. This concords with the state-wide trend in Michigan of substance-abuse treatment admissions tripling for opiate abuse and addiction since 2003 (MDCH, 2010).

Table 8.4 Potential for Abuse (N=353)

| Drug | Low/Somewhat low Potential | Some Potential | High Potential |
|---|---|---|---|
| Opioid drugs (N=326) | 1.2% | 4.3% | 94.5% |
| Prescription drug abuse (N=323) | 6% | 7.1% | 92.3% |
| Amphetamines (N=319) | 2.5% | 6.3% | 91.2% |
| Cocaine (N=324) | 2.1% | 7.1% | 90.7% |
| Heroin (N=319) | 3.7% | 5.6% | 90.5% |
| Alcohol (N=325) | 2.8% | 20.6% | 76.6% |
| Tobacco (N=324) | 13.5% | 15.1% | 71.3% |
| Marijuana (N=324) | 9.9% | 21.3% | 68.8% |
| Over the counter drugs (N=323) | 16.4% | 38.7% | 44.8% |

Key informant interviews indicated that the availability of drugs that are "sitting in people's medicine cabinets..." may be contributing to this increase in opiate abuse. One informant expressed concern about "...our society's dependency on drugs" and the belief that there... "is a pill for every ill therefore more is better" and this leads to the abuse of prescription drugs. Focus groups with key informants also revealed that "...a lot of kids raid their parents' medicine chest for drugs, and since many parents take a lot of medications...I think that's a growing issue also." Another group member added "...I know of more grandparents medicine chests than parents."

Key informant interviews with nursing home providers revealed the belief that elders are given "Vicodin® frequently" or "...dad is asking for a Xanax® every single night..." and they (family and medical staff) "...turn their heads because it's making them (the elder) okay for that moment...and I can't see this trend getting any less prevalent right now, it's hard for people who care....to take away something that actually makes them feel a little bit better even if it's for a little while." Several interviewees felt that prescription drug abuse and "chronic dependence on pain medications" by the elderly is "pushed under the rug" and just not talked about as a "substance abuse problem."

When comparing the current level of concern over the last three years, it is noteworthy that opioids remain the greatest concern among pharmacists. In fact, some pharmacies in the SEMCA region have enacted policies not to carry opioids and other drugs that are frequently abused, as there are "...more and more armed robberies... where pharmacists are placed in life and death situations when people come in to steal

any pain meds that pharmacies have." Because of this perceived risk of robbery in some areas, patients are forced to travel beyond their immediate community. This can be a "catch 22" situation because pharmacists reportedly believe that patients who try to fill prescriptions far from their home or from where their prescription was written are a "red flag" for drug misuse or diversion. Thus, pharmacists are presented with a conundrum—are these patterns of inappropriate drug seeking or legitimate prescriptions from patients in real pain?

"Please monitor the sales of OTC and other substances over the internet. Community has heard that the sales are done this way instead of local pharmacy purchase."

With the attention paid to OTC drugs in recent years, pharmacists have witnessed changes in their use. In spite of the low levels of concern currently expressed regarding the use of OTC drugs (See Table 8.4), over half the pharmacists surveyed reported an increase in concern regarding the misuse and abuse of OTC drugs over the last three years. Because of OTC drug misuse for synthesis of methamphetamine, policies have been enacted for tighter control over certain OTC drugs. According to key informants who engage in forming policy in state government, Michigan policy now in place restricts the purchase of OTC drugs in any particular pharmacy, but "...if you come to my pharmacy, then go down the road...today you could come into my pharmacy, sign the log, go into the pharmacy down the street, sign and log and you could rotate through it with so many days...you could do multiple buys."

However, these respondents reported being concerned about sales of OTC drugs on the internet. Internet sales of drugs are causing concern because there is no "local oversight." Nonetheless, pharmacists again ranked OTC drugs lowest on their potential for abuse. These findings coincide with trends of increases in prescriptions for pain drugs and their subsequent use and misuse.

Health care providers, in general, expressed a great deal of concern about the health impact of alcoholism. As noted by a registered nurse working in a nursing home – "...they're debilitated because they're alcoholic, their cognition is impaired, their livers are impaired, so they have a lot of medical issues related to chronic alcohol abuse..." and "...people don't take it as serious[ly] as they should [in the elderly].." because they're old...". This nurse also reported seeing an increase in younger people being admitted to nursing homes in the last 10 years – with many of them "...having a history [of alcoholism or drug abuse]" and that this younger population is often becoming permanently disabled as a direct or indirect effect of their drug and/or alcohol abuse. This creates a new, significant concern with regard to the cyclical effect of people with pain problems becoming physically and "...emotionally dependent on these substances..." leading to "...chronic dependence on narcotic pain killers secondary to pain issue..." and "...people in long-term care settings becoming dependent of benzodiazepines for sleep or to calm their mood."

These problems were noted to be present when people are admitted to care by mental-health specialists, nurses, social workers, and home health workers. Overall, key informants in health care and aging services all agree that there are potential drug-abuse concerns among all chronically disabled patients, whether in long-term care or at home.


## Concerns about Prescription Drug Abuse

Key informants and practicing pharmacists in the community were interviewed for a comprehensive view about substance abuse, prescription drug abuse, and diversion. Key informants included individuals involved in professional pharmacy associations, professors of pharmacy, and board members of SEMCA. While each of these interviews revealed specific concerns by discipline, there were some common threads. One was the large number of prescriptions from certain locations, clinics or doctors. The pharmacists are acutely aware of multiple prescriptions originating from one source. One pharmacist stated "As a clinical pharmacist working in a pain clinic, I often get calls from pharmacists regarding falsified Rx's, patients getting Rx's from multiple physicians, or see MAPS reports with certain physicians always prescribing the most abused medications, and I feel frustrated that there seems to be no avenue to shut it down." Pharmacists also report "...Certain physicians are fueling the problem running Rx mills, feeding the demand for illicit Rx abuse. The medical boards do not address this issue, the police do not know how to address the issue or take too long to address the issue. Pharmacists are left to play policeman and drug counselor."

Another theme that carried across key informant interviews was the concern that patients with legitimate prescriptions might have difficulty getting them filled. Key informants pondered "...when does the pharmacist become the cop versus the enabler..." but "...on the other hand, we have many legitimate pain patients who say they are made to feel like a 'junkie' when they get a Rx filled."

Pharmacists and other health care providers struggle with balancing their roles with prescribers (physicians). While they are aware of how prescribed drugs may negatively affect their patients, they experience difficulty expressing these concerns to the physician and patient. One key informant noted that an elderly patient "...took uppers in the morning, downers at night (valium), vitamin B during the day. She was just a basket case. Unfortunately, her doc wouldn't listen to me..." and "very few people accept counseling from pharmacists" even though community providers recognize that "...people probably go to the pharmacist more than they actually see their doctor."

## Perceptions of the Substance Abuse Problem

How do pharmacists actually define substance abuse? We asked pharmacists how they defined the term, with the majority responding that it is *any* inappropriate use of mind- or mood-altering substance(s) – which is consistent with the definition used by SAMHSA. Interviews with key informants and substance abuse agency staff found similar terminology—the use of a prescribed drug for something other than intended or for which it was prescribed. Clearly, pharmacists are cognizant of the abuse of drugs – prescribed or otherwise (See Table 8.5).

Table 8.5 Definition of Substance Abuse
(N=723-multiple response item, 353 respondents with 723 responses)

| | |
|---|---|
| Any inappropriate use of mind or mood altering substance(s) | 41.8% |
| Becoming addicted to any mind or mood altering substances | 24.3% |
| Developing tolerance to and physical dependence on mind or mood altering substances | 18.1% |
| Experiencing negative consequences as a result of using mind or mood altering substances | 13.9% |
| Other | 1.9 % |

Table 8.6 Define Prescription Drug Abuse (N=327)

| | |
|---|---|
| Any inappropriate use of mind or mood altering substance(s) | 66.3% |
| Obtaining and becoming severely dependent on prescribed drugs | 19.7% |
| Diversion of prescribed drugs with addictive potential | 7.5% |
| Diversion of prescribed drugs and sale for personal profit | 4.4% |
| Other | 2.2% |

In order to further isolate their specific perspectives on prescription drug abuse, pharmacists were also asked to define what that term means to them. They were asked to select the one definition they felt described prescription drug abuse best. Table 8.6 shows again, the most prevalent definition is inappropriate use of mind- or mood-altering drugs. Interestingly, the diversion of prescription drugs is not considered prescription drug abuse by pharmacists (although laypersons may conflate the issues).

## Perceptions of Medical Marijuana

The DEA classifies marijuana as a Scheduled I controlled substance that has a "...high potential for abuse and no currently accepted medical use..." and "there is a lack of accepted safety for use of the drug or other substance under medical supervision" (DEA, 2010). However, laws and policies have been enacted in Michigan and around the country to enable the use of 'medical marijuana', so pharmacists were asked their perceptions on this controversial issue. They were asked, specifically, what they felt the laws and policies

should be and their opinions of current Michigan laws. Our study found no overwhelmingly negative or positive consensus on this issue. In fact, there was no significant difference between those who felt it should be legalized and dispensed by a pharmacist versus that it should be illegal and not dispensed for medical use (See Table 8.7).

Table 8.7 Prescribing Medical Marijuana (N=282)

| | |
|---|---|
| By a licensed pharmacist from a pharmacy | 29% |
| Be illegal and not dispensed for medical use | 25.4% |
| By a registered caregiver with specialized training | 22.3% |
| Remain as the current law allows | 17.7% |
| Other | 5.7% |

Table 8.8 Dispensing Medical Marijuana (N=283)

| | |
|---|---|
| Be legalized for use under the supervision of a physician | 55.3% |
| Be Illegal and not available as treatment for medical conditions | 25.2% |
| Remain as the current law allows | 12.1% |
| Other | 7.4% |

However, opinions regarding the *prescription* of marijuana for medical use clearly favor legalization and use under the supervision of a licensed physician (See Table 8.8).

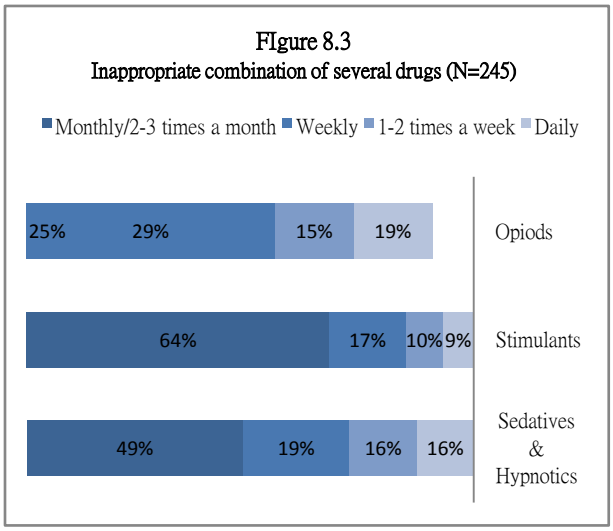
## Section 8.2 Pharmacist Observations and Experiences

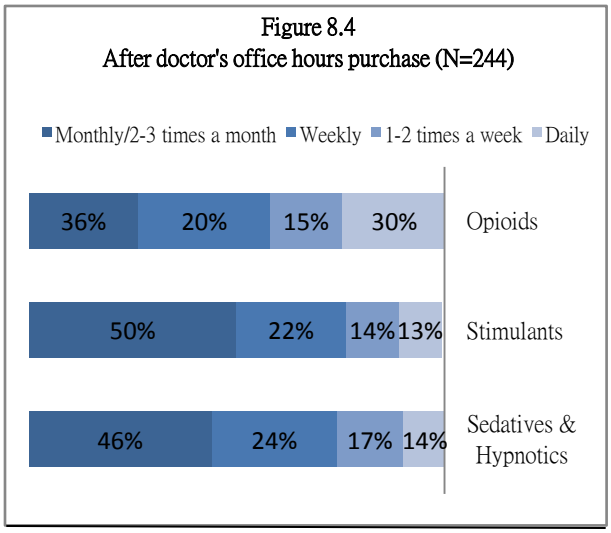
Pharmacists have professional standards to make sure that prescription drugs are prescribed and dispensed "for a legitimate medical purpose in the usual course of professional practice" (DEA, 2010). We posed a series of questions to understand pharmacy/pharmacist practices regarding [suspicious] behaviors of patients that could be indicators of misuse, abuse, and/or diversion of prescribed drugs.

Pharmacists were asked how often they observed the following behaviors and circumstances for various drug types: inappropriate combination of several drugs, after doctor's office hours purchase, falsified prescriptions, prescriptions from multiple sources, excessive number of patients with prescriptions from one doctor or clinic, excessive/repeat prescriptions at short intervals, prescription from non-local sources, and purchasing (smurfing) by family members.

According to MAPS data, Michigan is currently experiencing an increase in the number of prescriptions being written (MDCH, 2011). In addition to this increase in prescriptions, dosages and reasons for the

prescription are often questionable. The causes of this increase are unknown but, based on the observations and experiences of pharmacists charged with the responsibility of filling these prescriptions, prescription drug abuse and diversion is a problem that should be of great concern to physicians and pharmacists.



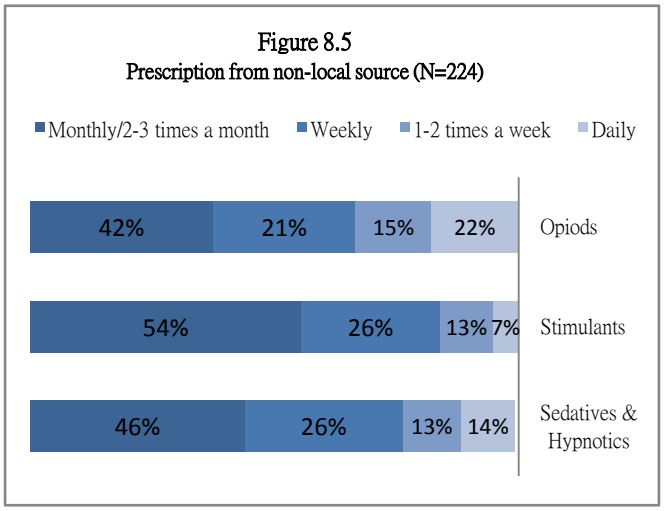



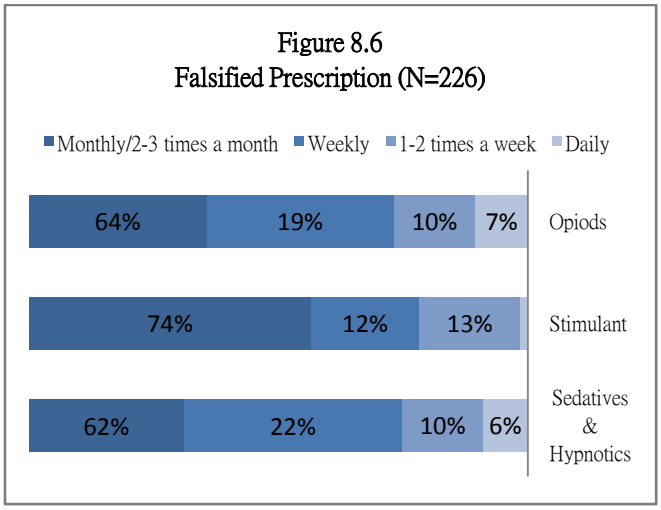

Observations made by pharmacists in our survey were confirmed by other key informant interviews. Pharmacists report that they struggle to distinguish legitimate need for pain management from drug misuse and/or abuse. The most prescribed pain drugs are also the most diverted and abused. Vicodin® is currently the most prescribed drug in the United States (SAMHSA, 2008) and is very effective for managing pain. So, pharmacists who are bound to uphold their professional standards often face a true dilemma when dispensing the drug.

The dilemma regarding Vicodin® is not restricted to pharmacists. According to a case manager for the homeless interviewed for this needs assessment, Vicodin® is one of the most frequently abused prescription drugs among the homeless. She reported that many homeless have a chronic disability and may have started using the drug for a legitimate physical condition. Unfortunately, homeless people live in vulnerable settings and their [legitimate] drugs may be stolen and diverted by other people. One way that pharmacists address these concerns is by running a MAP report. However, pharmacist key informants indicated that pharmacists are unable to run MAP reports on all prescriptions – simply because of the sheer volume of prescriptions that are filled on a daily basis – which was also reported by community pharmacists.

Pharmacists were asked how frequently they observed the behaviors noted in figures 8.3 through 8.10, with rather divergent results. Therefore, further examination of pharmacist location might shed more light on the findings. Note that figures 8.3 through 8.10 do not have the response "never" included in the chart to avoid any misinterpretation, because respondents working in hospitals, nursing homes, or other such practice setting did give this response (never responses can be found in Appendix L).

The most commonly observed behavior was "being anxious or jumpy while filling the prescription." (See Table 8.9 on page 181). Examination of the results of all questions reveals all behaviors are being observed on a fairly regular basis. This indicates that the issues are encountered frequently but apparently at the regular timed intervals of a prescription. The observation of inappropriate drug combinations (Figure 8.3) and purchase after doctor's office hours (Figure 8.4) regarding opioids are of particular interest.



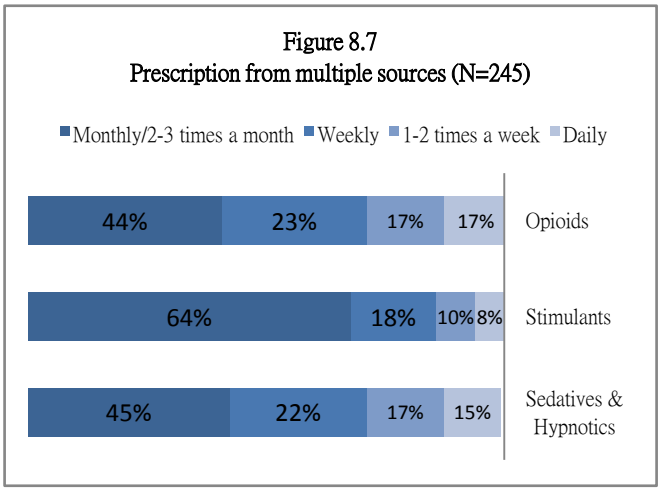



Figure 8.7
Prescription from multiple sources (N=245)

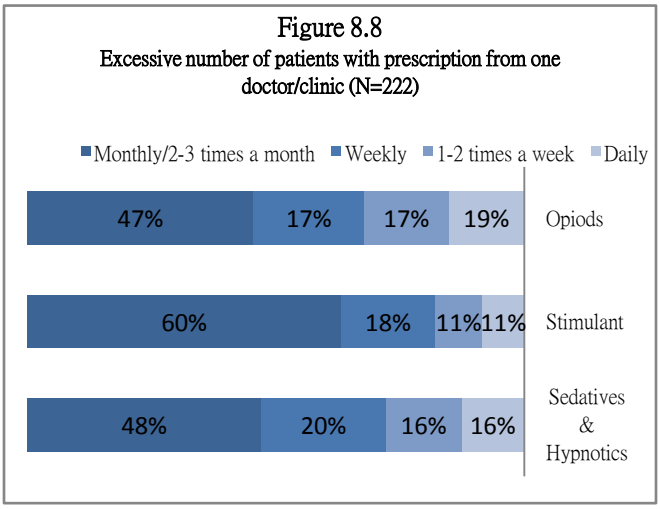



Figure 8.8
Excessive number of patients with prescription from one doctor/clinic (N=222)

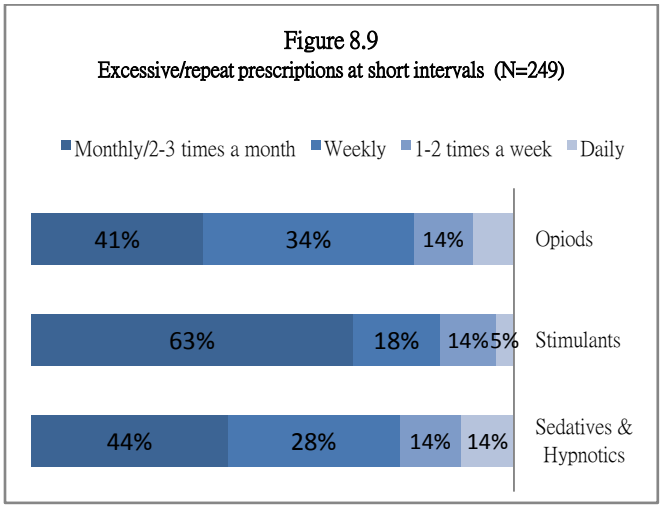



Figure 8.9
Excessive/repeat prescriptions at short intervals (N=249)

While opioids were previously identified as the drugs of greatest concern to the pharmacists, examination of the survey responses reveal that stimulants accounted for at least half of these observations. Three-fourths of respondents noted receipt of potentially fraudulent stimulant prescriptions (see Figure 8.6). Another concern reported by the pharmacists surveyed was "doctor shopping" – defined as visits by a patient to multiple locations to obtain several prescriptions for the same drug (See Figure 8.7). The patient then fills these prescriptions at a number of pharmacies, which enables the patient to obtain more than the recommended amount in any given time frame (DEA, 2010). People might also sustain an addiction or even sell drugs obtained this way for a profit.

According to the DEA (2010), excessive numbers of prescriptions from one doctor or clinic, a patient who returns frequently for refills, patients who are not from the community needing a prescription filled, and the concurrent prescribing of stimulants and sedatives are all potential warning signs that a prescription was not written for legitimate medical reasons. As part of responsible practice, pharmacists are constantly mindful of these behaviors. The pharmacists surveyed noticed the combination of behaviors of excessive

number of patients with prescriptions from one doctor/clinic (Figure 8.8), excessive or repeat prescriptions at short intervals (Figure 8.9), prescriptions from non-local sources (Figure 8.5), and scamming by family members (Figure 8.10). Surprisingly, these behaviors were seen for opioids less than for stimulants – suggesting that what is perceived as the greatest problem may be more a product of perception than reality. One respondent stated "At the current rate of use and ease of obtaining stimulant drugs (Ritalin®, etc.), the drugs should be rescheduled to Class 3. Or prescribing guidelines should be re-established. It is way over prescribed."

The most frequent behaviors for both stimulants and sedative/hypnotics are fraudulent prescriptions presented monthly/2-3 times a month (Figure 8.6), excessive number of patients with prescription from one doctor/clinic (Figure 8.8) as well as scamming by family members (Figure 8.10). These trends are of concern because addicts often use a combination of sedatives and stimulants to counteract the effects of their illicit drug use (SAMHSA, 2008).

Figure 8.10
"Scamming" by family members (e.g. smurfing)(N=190)

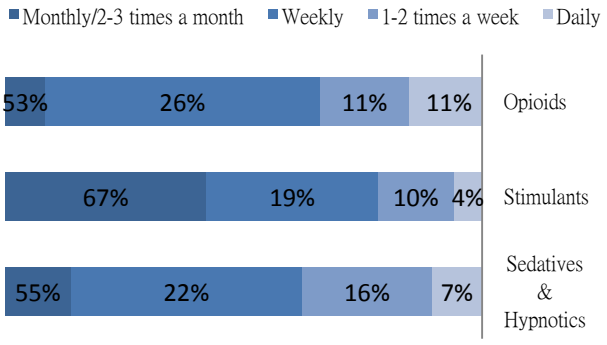



Table 8.9 Suspicious Behaviors

*(N=896- multiple response item, 353 respondents with 896 responses)*

| | |
|---|---|
| Is exceedingly anxious/nervous/jumpy | 23.0 % |
| Comes in after "doctors" hours | 19.9 % |
| Give me a bad impression ("gut feeling") | 18.1 % |
| Is agitated/irritable/aggressive | 17.0% |
| Is withdrawn with poor eye contact | 9.4 % |
| Other | 7.9 % |
| Is exceedingly subdued/down/depressed | 3.7 % |
| Has apparent physical injury/trauma | 1.0 % |

## Section 8.3 Professional Development

Pharmacists are trained to provide consultation for patients regarding their use of prescribed drugs. This professional responsibility includes education about the risks and benefits of drugs – including the risks of misuse, abuse or addiction. To understand the challenges pharmacists face in fulfilling their responsibilities as health professionals, pharmacists were asked what they believe are the responsibilities of the community

pharmacist in regards to prescription drug abuse. The results indicate that pharmacists feel a responsibility NOT to fill prescriptions that they feel are illegal or are likely to be used inappropriately. There was no overwhelming consensus for any one of the designated professional responsibilities but rather a fairly equal rate of response (about 1 in 5) for those relating to refusal to fill a presumed fraudulent prescription, educating the patient and counseling the patient about potential harm of the drugs. A lower rate (about 1 in 7) indicated they would discuss alternative therapy, refuse to fill an inappropriate prescription or notify law enforcement (See Table 8.10).

Interviews with key informants revealed a potential gap in the education pharmacists receive while they are in training. In fact, required PharmD curricula do not include the knowledge and skills necessary to identify the potential for prescription drug abuse and diversion. These issues are typically presented in elective courses.

Table 8.10 Responsibilities

*(N=1344- multiple response, 353 respondents with 1344 responses)*

| | |
|---|---|
| Refusing to fill prescription when I suspect an illegal prescription or inappropriate use | 20.5% |
| Educate the consumer about the potential for addiction and harm of mood and mind altering substances | 19.1% |
| Counseling the consumer about the potential for addiction and harm of mood and mind altering substances | 19.1% |
| Discuss alternative drugs and/or measures | 14.1% |
| Refusing to fill prescriptions for drugs with abuse potential if I suspect the drug will be used inappropriately | 14.0% |
| Notifying law enforcement when I suspect the potential for illegal use of prescription drugs | 13.3% |

In actuality, the concern is less about recognition of potential abuse or diversion, than what a pharmacist can/should do when they suspect abuse or diversion. Given these education/training challenges, it was heartening to observe that corporate pharmacy policies overwhelmingly support ethical pharmacy practice and standards (See Table 8.11).

Table 8.11 Corporate Policies (N=312)

| | |
|---|---|
| Are in line with practice & standards | 64.2% |
| Meets some ethical & practice standards | 23.7% |
| Exceed ethical & practice standards | 6.7% |
| Does not meet minimum practice or ethical standards | 5.4% |

This enables pharmacists to follow their professional code of conduct, while also meeting the expectations of their employers. Practicing pharmacists report that sometimes they do have difficulty reconciling their professional responsibility with the expectations of their employers. One respondent stated "Greedy Corporate chains like (chain pharmacy) cut tech hours and give no time for the pharmacist to address real issues. Controlled prescriptions from chains should be audited. There is an incident in (city in survey), where a (chain pharmacy) pharmacist was fired for not filling a CII Rx, for which the pharmacist called physician and was told to cancel the Rx. The so called "customer" called corporate, and he got the $25 gift card. ..."

## Comments from Pharmacists

It is common to give survey respondents an opportunity to add information they feel they would be useful. An open-ended question like this typically receives little response but, in this survey, approximately 20% of respondents (N=71) included personal comments. An overwhelming number of these made reference to pain medications and needing a mechanism to hold doctors accountable for their prescribing behavior. The comment categories are summarized in Table 8.12.

Table 8.12 Pharmacist Open-ended Question Comments (N=71)

| Comments |
|---|
| Doctors contributing to problem/need to be held accountable (over-prescribing, RX mills, not saying "no" to patients) (n=31) |
| Need stricter laws for prescribing and reporting abuse (triplicate blanks, greater regulations/penalties, patients identify doctors abusing, checklist to prescribers, doctors using MAPs) (n=13) |
| Identifying prevalent or increased opioid and sedative use and abuse- (docs prescribing and patients asking for oxycontin, opana, hydrocodone, soma) (n=12) |
| No steps pharmacists can take to combat the abuse problem (hold doctors accountable, law enforcement not helpful) (n=11) |
| General increase in substance abuse (n=5) |
| Doctors/Hospitals only care about $$/fear of losing patients (n=5) |
| Need mechanism for determining "abusers" versus those in need of pain control (n=4) |
| Medical profession too concerned with pain control (too many pain clinics and pain doctors) (n=4) |
| Pharmacists need to be held more accountable (require MAPs use, CEU's, counseling) (n=3) |
| Board of Pharmacy needs to monitor controlled substances more (n=3) |
| Identifying prevalent alcohol abuse or and increased in alcohol abuse (n=2) |
| Economic /employment downturn exacerbating substance abuse problems (n=2) |
| Identifying prevalent or increased problem with OTC abuse (need to increase monitoring) (n=2) |
| Change medication codes (come increased to C2 or C3, etc.) (n=2) |

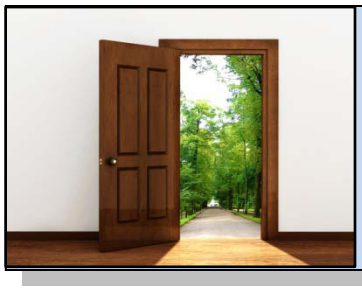
| |
|---|
| Corporate pharmacy chains contributing to problem (not doing "due diligence", all about $) (n=2) |
| Law enforcement/authorizes paying greater attention to physicians/pharmacists who support misuse/abuse (n=2) |
| Medical boards/societies need to monitor doctors more (n=2) |

## Summary and Recommendations (Pharmacist role only)

With the high rate of prescribing pain drugs, it is sometimes impossible for the pharmacist to determine if there is cause for concern. While survey respondents did indicate that company practices were usually aligned with best pharmacy practice, it was also noted that some chain pharmacies have customer satisfaction policies that are inconsistent with good practice.

Overall, this survey revealed that pharmacists are concerned about prescribing and dispensing practices today and are very sensitive to the role they could play in helping their community to better manage the availability of potentially harmful drugs. With improved education, training and community support many of them would be pleased to offer education and counseling to patients about appropriate (and inappropriate) use of potentially harmful drugs.

"I have seen a great increase in prescription for Roxicodone being presented at my pharmacy (also calls about Oxycontin and Opana). Many call or come in during the evening. Have had local patients bring me RXs from unfamiliar Drs. in {suburb of Detroit)...The patient and doctor are unknown to me and they often show up at 5:30pm on Friday... I have seen forged RXs on tamper-resistant paper which the doctor stated were not the blanks his office uses. Had a local physician or two who were not pain specialists or neurologists who dispensed a disproportionate amount of controlled drug...I don't want to turn away patients with legitimate pain, but don't want to be scammed and contribute to drug diversion either! With increased mandatory mail-order and $4/10 generic programs taking away business in our economy, a greater percentage or RXs seem to be controlled substances. More judgment calls, regulation, record keeping, professional concern. Verifying authenticity of a RXs after hours is always a concern for me. If it's an unknown physician, I worry, even during the day, it the physician is legitimate or if it's a prescription mill..."



# Chapter 9: Summary and Recommendations

## Chapter 9: Summary and Recommendations

Identifying the needs related to substance use disorders means having information and data on a number of factors that matter when identifying gaps in a service delivery system. These factors include understanding the causes or predictors of the problem. SAMHSA suggests, for example, that perceptions of low risk or harm are related to increased substance use. Needs are also determined by examining how many people are using substances locally, relative to state and national estimates. Information on barriers to obtaining treatment or recovery support also presents possible targets for change. The research team presented and discussed these various points of data with SEMCA officials over a series of meetings. The dialogue helped identify explanations for unusual patterns and helped to pinpoint strategies for consideration.

For the purposes of this final chapter, we organized and integrated the results from the previous chapters into the following areas of need. Each section concludes with recommendations for action. At the end of the chapter the researchers offer a synthesis of the findings with recommendations for a prioritization of communities.

- Awareness of the problem
- Availability of services
- Accessibility of services
- Quality of services

## Awareness of the Problem

### *Substance Use*

- Over half of the SEMCA population uses alcohol, which is less than the state estimate but greater than national estimate. These estimates are confirmed by data collected via the community survey.
- MiPHY and YRBSS youth data confirm that a majority of Out-Wayne and Monroe County youth who were surveyed reported no use of alcohol. This may serve as an indicator of the impact of prevention on alcohol use in this region.
- Illicit drug use rates for the State of Michigan and for the southeast sub-state region are nearly identical and also identical to national averages. Among high school youth, the data shows that Out-Wayne and Monroe youth report lower use rates of illicit drugs. However, data show a higher rate of methamphetamine use among middle-school-age youth, compared to high-school-age youth.
- With respect to marijuana use, the SEMCA region falls between national and state averages. The community survey verifies slightly lower use rates. High school marijuana rates are also similar to state and national averages, based on MiPHY and YRBS surveys.
- State and sub-state rates of non-medical use of prescription drugs (about 5.7%) are considerably higher than national rates (2.7%). In youth surveys, we found use rates of 5 to 7%, indicating an emerging problem, as youth rates are similar to adult use rates and above national averages. There were many

mentions of prescription drug use among the criminal-justice-involved populations and stakeholders confirmed the increased use patterns.

- Among persons residing in the SEMCA region, NSDUH estimates that 6.97% of the population 12 years and older needed treatment for an alcohol problem and did not receive it. In addition 2.5% of those 12 years and older needed treatment for illicit drug use and did not receive it. Using census data for the SEMCA population on all ages, this translates to 89,216 persons who needed help for alcohol problems and 27,520 persons who needed treatment for illicit drug use but did not receive it. Although this is an overestimate, if we use half of these individuals, we can say that 58,368 residents in the SEMCA region needed treatment and did not receive it.
- Among community residents, 22% reported they had a friend or family member that needed treatment for their alcohol or drug use in the past year but only 60% of those friends or family members who needed treatment made an effort to get it. Most of those friends or family members (90.6%) who made an effort to get treatment did receive assistance.

### *Consequences*

- An exploration of morbidity shows steady rates of hospitalizations related to substance use disorders from 2007 to 2010. Of the types of discharges we found a somewhat higher rate of substance use disorders (abuse, dependence, disorder, medical/psychiatric). Although the morbidity data covers a large majority of persons being discharged from hospitals for substance abuse-related conditions, it does not represent all residents who were hospitalized. In addition there is no way to confirm that all are SEMCA residents.
- Trends for SEMCA clients' primary substance of abuse indicate that alcohol continues to be the number one drug of choice. Data show an increasing trend in treatment admission for opiates, due in part to the decreasing trend in cocaine admissions. The rate of clients admitted for marijuana is also showing an upward trend.
- Clients in treatment are more likely to be younger, unemployed, white males with fewer dependents. This data may reflect economic conditions. It also reflects the increase in referrals to treatment from the criminal-justice system.
- Mortality due to the use of multiple drugs is highest across mortality averages, with 0.13 deaths per 1000 population, second is mortality due to heroin (0.11); third is mortality due to cocaine use (0.09) and lastly alcohol with 0.08 deaths per 1000 population.
- The highest rates of drug deaths across all three years (2008-2010) are due to multiple drug use. Multiple drug deaths were stable from 2008 to 2009, but showed a dramatic increase in 2010.

### *Perceptions of Risk and Seriousness of the Problem*

- Perceptions around the occasional use of various substances showed that half of the adults in the community think occasional use of alcohol is no/low risk, while approximately a third believes that occasional use of marijuana or cigarettes presents no/low risk. Almost 1 in 20 think prescription drug use for non-treatment presents low/no risk. Youth perceive that there is greater risk with regular cigarette smoking than regular marijuana use. Survey data also show that youth are unaware of the risks related to methamphetamine.

- About half of the residents think that illicit-drug use, alcohol use and prescription-drug abuse are serious problems in the SEMCA region. As a professional group, pharmacists' rated the seriousness of the problem higher.
- SEMCA stakeholders are aware of the costs related to SUD with most citing crime and health-related consequences.
- Attitudes of SEMCA residents, clients and other key stakeholders support the acceptance of substance use in both youth and adults. There is, however, a strong contingent of stakeholders who also think that it is unacceptable for youth to use any substances and they draw some distinctions for adults that mainly fall along the illicit and licit drug use debate.

### *Availability of Substances*

- Over half of the adults report that it is easy to obtain marijuana, with most indicating friends as the main source. Over one-quarter think it is easy to obtain cocaine, heroin, and crack citing a drug dealer as the main source. Almost two-thirds reported that it is easy to get prescription pain medication, with most citing a medical professional as the source.
- A majority of middle school youth report more difficulty getting cigarettes, alcohol and marijuana; however by high school, these numbers reverse with high school youth reporting greater ease to obtain all substances.

## Recommendations for Building Awareness of the Problem

1) SEMCA could spearhead community messages to increase awareness of the substance abuse problem and its relation to health and wellbeing. Awareness strategies could build upon message that use of drugs/alcohol is harmful, with particular attention to the dangers of prescription drugs and importance of proper monitoring of access to prescription drugs in the home. In addition, social marketing messages that emphasize the non-use rates among youth are important.
2) Campaigns could be organized that emphasize no/low problem use and target the attitudes of individuals more broadly about substance-related images. Specific attention could be given to the links between causes and consequences of SUD. In addition, efforts to support parental disapproval of substance use among youth should continue. Too many parents and other adults do not understand that their own attitudes or behaviors increase the probability that youth will use. This will challenge what people think, but it can be a powerful tool changing norms and attitudes.
3) Rates of alcohol and prescription drug use are higher, compared to other areas, which point to targets for prevention and treatment.
4) The rate of hospitalizations for substance use disorders suggests need for greater collaboration among SEMCA, hospitals and primary care physicians for more accurate diagnoses and identification of substance abuse issues in patients.
5) Explore collaboration with pharmacists who want to share what they know and play a greater role in the prevention of prescription-drug abuse in the community. For example, pharmacies could be identified as the place to take back old/unused prescription drugs for proper disposal. This prevention strategy may be expanded by exploring with law enforcement or global health groups where unused medications can be sent.
6) SEMCA can identify problem areas related to availability (e.g., physicians over prescribing, alcohol server interventions) and build coalitions on a county level to advocate for change.

7) Conduct training for providers, court personnel and other stakeholder groups, such as child-welfare workers, for routine screening methods for the misuse of prescription medications and other drugs.

## Availability of Services

### *Outreach*

- A majority (two-thirds) of residents indicated that they knew where someone in their community could get help for alcohol or drug problems. Most of those participants (57.2%) were also able to identify a specific place where someone could get help.
- Many clients relied on the help of others, family and friends in particular, in order to learn about treatment and how to access services. The decision to seek treatment was overwhelmingly the result of a feeling of being in a life that caused them to feel tired and worn down. Adults cited a lack of readiness to engage is treatment, and the need for furthering encouragement from friends and family as the reasons for delaying treatment. Youth clients, however, pointed out that they entered treatment only as a result of being caught in some trouble, so unless caught sooner, they may not have sought treatment.
- Clients with co-occurring disorders would have entered treatment earlier if they knew about SEMCA and its treatment providers and had more family support.
- Co-occurring clients report that the community lacks awareness of service and forms of recovery support.
- A small portion, 4–9%, of treatment providers points out that the availability of services, waiting lists, and no local services as barriers to treatment.
- To increase retention, treatment providers recommend improvements in care (e.g. continuum of care, follow-up, step-down) and additional funds for programming.

### *Treatment Availability*

- The number and range of treatment options available show an emphasis on outpatient services, with 27 programs providing outpatient or intensive outpatient services; 12 programs offer residential services, 4 providers at 5 sites provide detoxification (3 in Detroit, 1 in Monroe and 1 in Canton) and 3 (all located in Detroit) provide methadone maintenance.
- 14 programs provide outpatient treatment for adolescents and 2 provide residential treatment.
- There are 4 programs that identify older adults as a special population and 7 programs that target women for their treatment services. Across all funded SEMCA providers, three percent of clients are over the age of 55 and 33% are female.
- Over a three year period, 9106 individuals completed 11,791 treatment episodes. Most individuals served in the SEMCA region experience one treatment episode (79%).
- In the last three fiscal years, SEMCA providers produced far fewer units of residential short term treatment from 2007 to 2010. In addition, intensive outpatient level 3 care has also been reduced by over one-half in the past three years. Concurrently, there has been a major increase in methadone maintenance units provided between 2007-08 and 08-09 and decreased in 09-10, due to tighter screening and monitoring.

- About 17% of clients waited 15 or more days from their time of screening to admission. However two-thirds are able to start treatment in the state-mandated time frame of less than seven days.
- Most individuals in treatment stay 31 days or more per episode (59%).
- Average length of stay from 2007 to 2009 has decreased from 64 days to 49 days.
- Greater proportion of clients with no prior treatment episodes and number of previous treatments overall has decreased.
- Two in every five clients (40%) left treatment against advice; 28% completed treatment and 15% continued to another phase. Those involved in drug court were more likely to complete treatment without any criminal justice supervision, although this varies by court.
- Many people continue to obtain treatment for substance abuse or mental health issues from separate agencies or agencies without special co-occurring treatment. Half of individuals in SEMCA treatment have a co-occurring disorder and tend to be female, white, and unemployed. A majority of individuals, as they moved from screening to assessment, to discharge had a consistent diagnosis of a mental health issue.
- Majority of treatment providers report that at least half of their staff has been trained in co-occurring disorders.

### *Recovery*

- Definitions of recovery can be highly personal. SEMCA clients see it as first being "clean and sober." Equally important and related in their definition of recovery was the ability to use new skills to build a better life and make better choices. Similar replies talked about being a better person, having better relationships and a "normal life."
- Their recovery goals were fairly similar to their definitions, but included activities and plans delayed due to their use and treatment. The most popular responses were about finding jobs and school. Similar to their response defining recovery, many mentioned wanting to stay sober.
- Clients point out that they have received good support from family, but less support from friends, neighbors, and the larger community.
- Clients say that the community could be more supportive by changing attitudes to reduce stigma, and by raising awareness about support services available.
- Triggers for use are a major challenge for recovering clients. When provided a list of triggers, nearly all triggers were cited as potentially dangerous.

### *Recovery Oriented Systems of Care (ROSC)*

- The continuum of care for substance abuse embraces the ROSC model of recovery support. Seven agencies provide relapse recovery services; clients from the criminal justice system reported a lack of care after treatment ended.
- While treatment providers indicate a fair degree of preparedness, there is still a good deal of room for improvement. Directors feel less prepared in respect to offering additional services.
- Prevention agencies are generally positive about ROSC. 84% say they understand how ROSC will affect prevention services, 72% are working toward service alignment, 59% say they have changed programs/process to fit ROSC principles, only 21% have provided training in ROSC.

- As for ROSC readiness, prevention agencies also report moderate to high levels of readiness for nearly all components mentioned including: providing programming in schools, programs for family education, and raising community awareness. There is slightly lower readiness for social marketing, early intervention, and lowest for public policy advocacy on behalf of their clients.

## Recommendations for Increasing Availability of Services

1) State and sub-state rates of non-medical use of prescription drugs are considerably higher (almost double), compared to national rates. SEMCA could examine the capacity of prevention and/or treatment programs to determine if and how procedures and practices may need to be revised to address those who are using prescription drugs.
2) The high rates of illegal prescription drug use may also point to the need for strategies in the region that combat illegal prescription and painkiller drug use, such as increased diligence on the part of pharmacists and doctors to monitor and report signs of abuse or misuse.
3) Increase strategies for information dissemination as they relate to treatment resources and continuum of care; this is particularly important for criminal-justice clients, including women, after they complete expectations for drug court and treatment.
4) Create more opportunities for collaborations around continuation of care. Transition points need to be examined and there needs to be better use of liaisons. Losses can occur at all transition points.
5) Examine treatment demographics and determine rate of return for funding specialized services; older adult services may not be providing the return expected, whereas youth services may be underfunded.
6) People with co-morbidities may require a more holistic approach to treatment.
7) Increase attention to reducing stigma for individuals with COD, including training for providers and community to explain significant overlap in contributory factors for both mental illness and substance use disorders.
8) Women in the criminal justice system have much higher rates of mental-health and substance abuse problems, suggesting an increased emphasis is needed on training for gender specific services. With the increasing focus on the impact of trauma among substance abusers (especially among women), SEMCA could continue to provide a series of trainings on evidence-based practices for preventing and treating trauma.
9) SEMCA could work with drug courts to create a better interface with the treatment and recovery community as well as undertake efforts that will help in creating more consistency across the various drug courts.
10) In recovery, clients need greater access to social support and stigma-free environments to encourage their sobriety.
11) SEMCA could identify ways to improve fidelity to, and utilization of, IDDT services for clients with co-occurring issues.
12) SEMCA could convene a workgroup to identify ways to improve program completion.
13) Results show the need for training with clear materials on expectations about ROSC and how to collaborate and write memorandums of understanding (MOUs) s with other agencies.
14) Prevention staff needs training in using social media to support prevention messages and especially advocacy measures.
15) Conduct ROSC model training to inform policy changes for implementation and to help agencies to implement ROSC in their programs.

16) Expand the available recovery support system in non-traditional ways (not only AA) and non-traditional places (community centers, malls, events, workplaces).

## Accessibility of Services

- The analysis of treatment demographics indicate a shift in emphasis by the court-involved clients, with increase case finding through the development of drug courts. Although this represents an important addition and treatment facilitator – the data may suggest that access to treatment is lower for non-court involved clients.
- Transportation continues to be one of the most significant barriers to accessible treatment; this is particularly true for clients involved in the criminal justice system. The main barrier for co-occurring clients is not knowing who to call.
- Treatment providers also identified the lack of insurance/funding for treatment as major barriers.
- There is a very high rate of SEMCA clients in the criminal justice system (44% of Out-Wayne SEMCA clients and 50% of Monroe).
- Women with substance use disorders and involvement in the criminal justice systems have higher rates of mental health and substance abuse issues.
- Prevention providers perceive a lack of support for prevention; 60% of community residents do not think there are enough prevention programs.
- There is a lack of integration with physical care in the system.
- Trauma informed service is not occurring in practice- these services have either not been integrated into agencies at all or not integrated effectively.

## Recommendations for Increasing Accessibility of Services

1) Offer training for providers and judges who may not understand the special needs of female users and the dynamics of being involved in the criminal justice system.
2) Training of medical and treatment staff in screening and treatment of substance abuse in the geographical "hot spot" areas, or medical "hot spots."
3) Conduct a readiness evaluation and training on assessing level of readiness in co-occurring clients.
4) SEMCA could collaborate with Michigan Works to emphasize substance abuse in their trainings. For example, subjects such as stages of change and/or motivational interviewing may increase access to treatment services.
5) Criminal justice systems receive funding from different sources for substance abuse services. In light of these competing funding sources available to those in the criminal justice system, SEMCA could review its allocation of resources and collaborate with the criminal justice system to clarify and streamline services for those clients and to address the unmet needs related to the non-criminal justice population in the region.
6) Provide more information about eligibility for treatment, including an emphasis on SEMCAs role in providing treatment for indigent, uninsured clients.
7) Provide additional funding for transportation vouchers and services to engage clients in appropriate treatment. Other types of strategies may also be useful, such as contingency management approaches that will work to keep people in treatment longer. In addition SEMCA could make resources available for pilot programs that employ tele-medicine to reach and treat clients without transportation. These

new initiatives could be required to implement programs with evidence-based protocols and strong evaluation.

8) SEMCA needs to provide direction through its resources to guide the awareness of the expanding role of prevention beyond traditional substance abuse prevention to a more public-health and wellness focus.

## Quality of Services

- An examination of perceptions of treatment services revealed mixed views. Among the community residents, approximately half reported that their community is well prepared to deal with alcohol and drug use and is doing everything it can to address alcohol and drug problems there; between 40-44% of residents believe there are enough treatment and prevention programs.
- Most residents surveyed felt that both prevention (78.8%) and treatment (81.8%) programs are effective in addressing alcohol and drug problems.
- A variety of groups who participated in the needs assessment have similar views on the quality of treatment. Providers who completed the email survey rated the quality of treatment as fair to good. Key informants had a range of views on quality, but for the most part, they see quality of treatment as good, but with room for improvement. Treatment clients, including clients with co-occurring problems, expressed very positive views on the quality of treatment.
- Youth in treatment were not positive about their experience. This view may be colored by the fact that nearly all youth are mandated to treatment as part of a court order. In addition, youth may be more influenced by negative peer perceptions.
- At last admission, 40% of clients are leaving against staff advice as their discharge status.

## Recommendations for Improving Quality of Care

1) Results about effectiveness of treatment vary by perspectives. While community members have positive views, key informants lack clear information for an informed opinion, while treatment providers acknowledge a system in need of improvement. They see benefits of treatment, but they realize that effectiveness definition is changing. SEMCA could engage its network of providers, boards, and other stakeholders to identify new elements of treatment effectiveness including the definitions and measurement of treatment.
2) Additional attention to prevention of access to drugs while in treatment is a concern and could be a priority for quality review. One set of clients shared multiple stories of lax security, attributing some issues to MPRI clients co-located, and some to lack of staff oversight.
3) Youth treatment could be re-examined, in particular the use of traditional 12-step models. Youth and younger treatment clients had more negative opinions of AA and treatment that is available. Serious consideration could be given to exploring innovative approaches to youth treatment. Specialized services and youth-only support groups should be more widely available.

## Synthesis

The purpose of conducting this regional needs assessment is to leverage limited substance abuse resources to address regionally specific current and anticipated community needs to achieve the greatest impact. This purpose implies that prioritization of needs is necessary even for administrative agencies with responsibility for large geographic areas and diverse populations. One method for prioritization is to rank and compare

communities across indicators of need, where geographic data is available at the sub-community level. As the table below shows, some communities exhibit high rates across two or more indicators of need for substance abuse treatment including: Highland Park, Wayne, and Ecorse. When you examine the table by type of rate we see that Wyandotte, Belleville and Grosse Pointe have high rates of death related to substance use disorders; whereas Hamtramck, River Rouge and Inkster have residents with high numbers of hospitalizations involving alcohol or drug abuse. Finally, we found that, in addition to Highland Park and Wayne, Ecorse, Flat Rock and Rockwood have the highest rate of residents seen through the SEMCA provider system.

### Table 9.1 Top Five Communities

| Highest Mortality Rate | Highest Morbidity Rate | Highest Treatment Episode Rate |
|---|---|---|
| Wayne | Highland Park | Highland Park |
| Wyandotte | Hamtramck | Ecorse |
| Belleville | Ecorse | Flat Rock |
| Highland Park | River Rouge | Rockwood |
| Grosse Pointe | Inkster | Wayne |

When you compare the data in the table above with the maps in Chapter 3, you can observe that there may be a lack of access for those persons with substance use disorders. At a minimum, the data suggest that more outreach, treatment and recovery support will be important for those cities with the highest morbidity rates. With the exception of Highland Park and Ecorse, treatment facilities are not located in the cities with the highest number of treatment episodes. This appears to be a mismatch of services and need.

## Synthesis Summary and Recommendations

1) Funding is going to the same providers, despite evidence that funding may not be going to the right providers, or going to the right areas.
2) With the scarcity of resources and increased demand, there is a clear need for increased accountability. Use of evidence-based treatment, fidelity measures and other evaluation could be required and reviewed regularly. Hamtramck and Highland Park are high-need communities, both of which are serviced by Black Family Development Inc. and Neighborhood Service Organization. Estimates suggest that there is a greater need for services than are currently being provided (e.g., only 136 individuals were treated by BFDI from FY 07 to FY 09, averaging 45 individuals per year).
3) Administrative organizations, like coordinating agencies, are largely driven by funding rather than mission. This means a greater emphasis on servicing contracts and clients than implementing change strategies for the greater good of the SEMCA region. Alcohol and drug use is influenced through social norms, personal and psychological reasons and biological/genetic factors. SEMCA could serve a broader mission seeking to address alcohol and drug problems through multiple strategies as they impact the larger community.
4) SEMCA region has barriers similar to rural areas, due to dispersion of population, combined with a lack of a strong transportation infrastructure. This speaks to a need for a redistribution of resources and services to meet the needs in the SEMCA region. This may mean emphasizing the use of satellite branches, tele-health methods, and intensive outpatient services to facilitate the process of treatment with adequate recovery supports in the community.

5) SEMCA could strive to increase the infusion of treatment and technology models that are used in primary care and public health. This will help pave the way for wider systems integration between primary and behavioral care expected through upcoming changes in health policy and, as recommended by the National Institutes of Health, think tanks and social model innovation.

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# Appendix A: Primary and Secondary Data Sources and Data Collection Methods

We employed multiple methodologies in the needs assessment, for both primary and secondary data collection. First, primary data collection methods included: interviews with SEMCA consumers, interviews with key informants who have knowledge of the SEMCA service population, focus groups with youth and parents who are consumers in the SEMCA region as well as the Department of Human Services and SEMCA advisory boards. Other primary data collection methods included web-based surveys of Executive Directors at SEMCA provider agencies, treatment staff at SEMCA provider agencies, and prevention providers and pharmacists serving the SEMCA region, along with a telephone survey of community residents in the SEMCA region. We also collected secondary data describing the population, geographic region, and individual harm and consequences related to substance use disorders. The methodologies are described below, including limitations. All protocols in the methodologies detailed below were submitted to and approved by the Wayne State University Institutional Review Board, including informed consent procedures.

## Primary Data Collection Sources and Methods

### Structured Interviews with Co-occurring and Adult Consumers

We conducted structured interviews with SEMCA consumers, based on the consumers' current presence in a treatment location supported by SEMCA. A total of 19 adult interviews were conducted at two locations. In addition, we interviewed co-occurring disorder consumers at two other locations, with a total of 11 co-occurring interviews conducted. Interview participants were solicited through flyers and presentations about the needs assessment study. As compensation for their participation, respondents were given gift cards. All interviews were conducted anonymously and only first names were collected. Researchers used a structured interview format to capture consumer's experiences, observations and perceptions about being in the substance abuse treatment system. Each interview lasted from approximately 40 minutes to one hour and 15 minutes. Interviews were audio-recorded for transcription and each respondent was provided a gift card.

*Limitations:* These interviews do not reflect the views of all co-occurring or traditional consumers in the SEMCA service delivery population, but are a convenience sample of consumers. There may be differences between the consumers who agreed to participate in the interviews and others in the treatment population. Additionally, it must be noted that there are particular limitations when interviewing consumers with mental-health problems. Namely, these individuals may have difficulty in articulating and expressing the nature of their true experiences and reflecting of these experiences may be painful for them. Mental health consumers may view the interviews as an avenue to vent frustrations and these frustrations may color, alter

or distort real experiences (Moyle, 2002). Alternatively, some may not express unfavorable opinions because they are grateful for treatment experience or worry about confidentiality.

## Interviews with Key Informants

We conducted 32 key informant interviews that were identified in collaboration with SEMCA staff. Key informants were contacted by members of the research team and agreed to participate in qualitative, semi-structured interviews. These persons were asked questions regarding their knowledge of the SEMCA substance-abuse treatment region, their perspectives on the causes and consequences of substance abuse for youth and adults, among other questions. Some of the interviews contained specific questions related to the interviewee's area of expertise. Each interview took about one hour and was audio-recorded for transcription. The following key informants were interviewed for the SEMCA needs assessment project:

Table A.1 Key Informant Interview List

| | |
|---|---|
| Sarah Kirk | Wayne County Representative Michigan Pharmacists Association and Practicing Pharmacist |
| Denyse Jones | Highland Park Schools Safe & Drug-Free Schools Coordinator – Highland Park, Michigan |
| Geralyn Harris | Program Director, Monroe County Community Mental Health |
| Lisa Wayne | Michigan Works! Southgate, Michigan |
| Darwin Scott | DRANO |
| Terri Langton | Monroe Intermediate School District Monroe, Michigan |
| Dale Yagiela | Director, Growth Works |
| Larry Wagoneck | Director, Michigan Pharmacists Association |
| Scott Schadel | Program Manager, Hegira Oakdale Treatment Center |
| Tracy Gomez | Monroe Community Mental Health Authority |
| Gus Shihab | Arab-Chaldean Center Hamtramck, Michigan |
| Dr. Adnan Hammad | Sr. Director of the Community Health & Research Center, Dearborn Michigan |
| Lee Tobar | Inkster Teen Health Center Director Inkster, Michigan |
| Ken Pelland | Detective, Grosse Ile Police- Downriver Party Patrol |
| Dr. Raymond Edison | SHAR House Med Director |
| Gina Zapleski | American Indian Health and Family Services |
| Diane Mantes | Director, Save our Youth Coalition, Livonia |
| Kevin O'Hare | CEO of Touchstone Recovery |
| Trish O'Connor | Case manager at ChristNet. |
| Sergeant Moug | Livonia Police Officer, Investigations Bureau |

| | |
|---|---|
| Miriam Austin | Social Services Director |
| Jill Sims | Home Healthcare Liaison |
| Diana G. | Clinical Assessment Nurse |
| Adam Beyers | Geriatric Clinician/Therapist, Senior Well-Being |
| Tammy R. | Social Services Director, Regency Healthcare Centre |
| Nadezda Stojcevska | 16th District Court, Drug Court Coordinator, Livonia Michigan |
| Katie Slabaugh | 19th District Court, Drug Court Coordinator, Dearborn Drug Court, Dearborn Michigan |
| Deanna Warunek | 23rd District Court, Drug Court Coordinator, Taylor Drug Court, Taylor Michigan |
| James Gibbs | 28th District Court, Drug Court Coordinator, Southgate Drug Court, Southgate Michigan |
| Jim Hand | 35th District Court, Drug Court Coordinator, Plymouth Drug Court, Plymouth Michigan |
| Beryl Fletcher | 3rd Circuit Court (Juvenile), Drug Court Coordinator, Wayne County Drug Court, Detroit Michigan |
| Frances Fogel-Gibson | 3rd Circuit Court (Adult), Drug Court Coordinators, Detroit Michigan |

*Limitations:* These interviews do not reflect the views of all key stakeholders in the SEMCA region, but only those with whom the team had access and who agreed to participate. Therefore selection bias is a limitation to the generalizability of the results presented from most stakeholder interviews (Weathers et al, 2011). These persons were asked general questions related to the needs assessment and in some cases had limited knowledge of all areas involved in treatment. For example, interviewees who worked directly with the treatment population had a different knowledge base then the perspective offered by law enforcement personnel. Regional differences were also identified in key informant responses; therefore any generalizations made from the responses must be done with caution. Specific limitations should also be noted, including those interviews with persons from older adult services, which do not reflect the interdisciplinary nature of elder care in the community or institutional settings. Those interviewed do not provide direct or prolonged care to older adults, so those interviews offer administrative and treatment perspectives. Interviews on homelessness and substance use disorders represented different perspectives in terms of their geographic location, their role in the substance abuse treatment system, and the stage of recovery of the people they serve.

## Focus Groups

We conducted seven focus groups for the needs assessment; two made up of parents, two of youth in treatment; one group with staff from the Department of Human Services (DHS) and two made up of members of the SEMCA Advisory Board and the SEMCA governing Board. Parent and youth focus groups were conducted at two treatment sites targeting youth. At each site a youth in treatment focus group and

parent focus group were conducted. One treatment site did not have enough youth to be included in the focus group, so this focus group became a one-on-one interview. All focus groups were audio-recorded and transcribed for analysis.

Youth focus group participants were asked questions about their treatment experiences, what motivated or pressured them to seek treatment and what could have helped them get into treatment earlier, among other things. Similarly, parents of youth in treatment were asked about what led their youth to being in treatment, what can be done to improve the treatment system for youth and questions about their community's views on substance abuse among others. Youth and parents were provided with gift cards for their participation.

Child welfare workers who work for Department of Human Services (DHS) participated in a focus group. DHS participants were asked questions about their perceptions of the prevalence of substance abuse among DHS clients, what they perceive as the main cause(s) of substance use and abuse among adults and youth and consequences of use, among others.

Finally, the SEMCA advisory board and the SEMCA advisory Board agreed to participate in a focus group for this needs assessment. Board members were asked about the SEMCA community's general perceptions about youth and adults using substances, what they believe the main causes of substance use and abuse are in the region and what they believe are the main consequences of use, among others. These focus groups were audio recorded and transcribed for analysis.

*Limitations:* These focus groups do not reflect the views of all youth and parents in the SEMCA treatment region. Additionally, the DHS and SEMCA advisory board focus groups may not accurately reflect the views of every member of DHS or every member of the SEMCA advisory board, only those that attended the focus group sessions and verbalized opinions. In addition, focus groups as a method of data collection include some inherent limitations including; a tendency towards normative discourse, individual group members dominating the group and conflicts and arguments that may arise in the group (Smithson, 2000). Although trained facilitators were used, there may have been a few members who dominated the group and other members whose true opinions or experiences may not have been shared.

### Web-based Surveys with Providers

Web-based surveys were conducted with the Executive Directors and staff of SEMCA treatment and prevention providers. Researchers sent an email directly to 46 Executive Directors requesting their participation and 74% responded (n=34). Staff participants were more challenging to recruit because there is not a master list. Consequently, researchers asked the Executive Directors to forward an email to all of their appropriate staff members who were provided a link for them to take the survey online. Although 117 treatment staff and 34 prevention providers completed the on-line survey, we are unable to calculate a response rate and determine the representativeness of the sample. Responses were provided anonymously and were not connected to individual respondents and results from each group were analyzed in the aggregate. Treatment providers were asked questions concerning their agency, the population they serve,

their perceived competence with treating co-occurring disorders and their perceptions of need for treatment, among others. Executive Directors were asked questions that were very similar to the treatment provider questions. In addition, Executive Directors were also asked questions about their agency's policies in regards to treating co-occurring consumers and percentage of service population with co-occurring disorders. Prevention providers were asked questions about the extent of substance-abuse problems in their community, quality of prevention efforts, barriers to prevention and perceptions of need among various population groups, among others. Survey responses were collected using Zoomerang online survey software, results were uploaded into Microsoft Excel and close-ended items were converted to SPSS for analysis. Qualitative responses were analyzed using the methods described later in this section.

*Limitations:* Web-based surveys were administered to treatment staff, prevention staff and Executive Directors of SEMCA area agencies. The results are limited to the data collected from those who agreed to participate in the online surveys. The response from the Executive Directors was sufficient. Unfortunately, we were unable to calculate the response rate for the staff. Many treatment and prevention staff may have chosen to not participate in the surveys, therefore limiting the generalizability of these results to the SEMCA treatment community. Additionally, unforeseen computer problems, inaccurate emails or other technological problems can limit the accuracy of data collected via the internet. Some staff or EDs may not have equal access to computers or be as computer proficient, further limiting the generalizabilty of results (Chen, 2010).

### Web-Based Survey with Pharmacists

*Overview:* Determining a method to contact pharmacists working in the SEMCA region was a challenge. This challenge was due to the multiple locations where pharmacists work and the sheer volume of chain pharmacies and clinics in any given area. Additionally, it was not possible to contact each and every pharmacist at their place of work because of unavailability of emails, phone numbers, or names. After consulting with the Wayne State School of Pharmacy, we decided to use the state organization for pharmacists (Michigan Pharmacists Association) to contact members with addresses from Wayne, Oakland, Macomb or Monroe counties. Approximately 40% of practicing pharmacists are estimated to belong to this professional association.

In the fall 2011, we contacted a random sample of pharmacists to participate in a brief survey about substance abuse and their perceptions of needs, barriers, and problems related to prescription-drug abuse in out-Wayne and Monroe counties. 1672 pharmacists were emailed and 956 were mailed an invitation to participate in an online survey. Of those pharmacists contacted, 353 completed the online survey for a 13% response rate. Participants were offered an opportunity for a drawing of 10 gift cards and an I-Pad.

While the needs assessment was specifically targeting out-Wayne and Monroe counties, it was determined to include all respondents in the analysis. Interviews suggested that pharmacists often work at more than one pharmacy, and that pharmacists serve individuals from other counties

*Sample Characteristics:* Almost half (45.7%) of respondents work in Wayne County with 30.9% working at least some of their time in the city of Detroit. One third (32%) worked in Oakland County, 17.9% in Macomb County, and 4.4% in Monroe County.

The pharmacists represented in this sample are all licensed in the state of Michigan, with an average of 22.3 years in practice. Almost two-fifths (39.1%) work at a large chain pharmacy and 3.7% work at more than one pharmacy. 29.4% of respondents are educated with a Pharm.D, followed by 26.9% at the Bachelor's level and 33.7% with some training past the Bachelor's level as well. The sample was primarily Caucasian at 79.7%. Gender was evenly distributed with 49.5% female and 50.5% male.

*Limitations:* The response rate for the prescription drug abuse survey among pharmacist presents significant limitations to the external validity of the data. While the survey data are not intended to reflect the views and perspectives of all pharmacists in the SEMCA region, they do reflect a valuable perspective from outside of the SEMCA treatment system.

## Community Survey

*Overview:* In order to assess community perceptions of substance use in Out-Wayne and Monroe Counties, we contracted with the Wayne State University Center for Urban Studies to conduct a household survey of adults 18 years and older who reside in these communities. Data collection for the multi-method survey relied primarily on computer-assisted telephone interviewing (CATI) and was supplemented with a mailed paper survey for non-respondents. This approach allowed us a relatively high level of coverage of the out-Wayne and Monroe county population and ensured both the privacy and accuracy of reports of sensitive attitudes and behaviors (Galesic, Tourangeau & Couper, 2006).

The surveys asked residents what they believe are the causes of substance abuse, what factors contribute to substance abuse problems and what solutions are effective and should be available in their community. The survey also assessed knowledge of resources in the community, if the participant's family or friends have needed treatment for substance-abuse problems, barriers to treatment, and to what extent the participant supports various strategies to establish or maintain a system of recovery.

A total of 563 unduplicated surveys were completed by residents of Out-Wayne County and Monroe County. Approximately 71.6% of participants completed the survey by telephone, while 30.4% completed the mailed paper survey.

*Sampling*: A sample of telephone numbers for Out-Wayne and Monroe counties was obtained using a random digit dialing procedure and stratified to achieve proportional representation by county. The list of telephone numbers was checked against known disconnected numbers and business numbers and these ineligible numbers were removed. This resulted in a total sample of 3,423 active telephone numbers. The sample of active numbers was then sent to a directory information service provider that matched addresses to the telephone numbers. Three-quarters of the telephone numbers (n=2,616 or 76.4%) were able to be

matched with an address. An additional 333 telephone numbers were removed from the survey sample due to known ineligibility (e.g. disconnected number, business number, computer/fax/modem, or unqualified resident) and 1596 telephone numbers had unknown eligibility (e.g., busy signal or no answer). A final response rate[1] 0f 20.1% was obtained for the survey and the overall margin of error was +/-4.1 percentage points.

*Telephone Interview:* Trained telephone interviewers from the Wayne State University Center for Urban Studies called through the sample of active telephone numbers, up to six times. They completed as many interviews as possible, while also determining if telephone numbers were eligible for the study (e.g., whether it was a business number, whether the household was in Detroit). Individuals who indicated they did not have time to complete the survey over the telephone were offered the survey by mail. The telephone data collection occurred from April 28, 2011 through June 2, 2011. The total number of completed telephone surveys was 403. Upon completion of the survey, respondents were offered a $5 gift card. 333 respondents completed the telephone interview and were mailed the gift card.

*Mail Questionnaires*: In order to ensure an adequate sample size and inclusion of individuals with only wireless telephone service or with no phone service at all, (Galesic, Tourangeau & Couper, 2006) the telephone survey was supplemented with paper surveys for non-respondents. Paper copies of the surveys were sent to all non-respondents that we were able to match to a mailing address. A total of 1615 surveys were mailed and the total number of competed mail surveys was 160. Participants completing the mailed questionnaire were also offered a $5 gift card as a token of appreciation for their participation. There were 130 respondents who returned the paper survey and were mailed the gift card.

*Limitations:* The multi-method approach of this survey helped us to understand community perceptions of substance use in Out-Wayne and Monroe Counties and exceed our goal of 400 completed surveys. However, it should be noted that there are several limitations to this work. Recent research on telephone surveys has indicated that while random-digit dialing sampling strategies may still be appropriate for health-related surveys of adults, the potential for bias is greater when drawing inferences on young or low-income adults (Blumberg and Luke, 2009). Throughout the data collection process, we also made diligent efforts to follow up with members of the survey sample in order to ensure representativeness of the Out-Wayne and Monroe Counties population. These efforts included multiple attempts to contact respondents by telephone at varying times of the day and on varying days of the week, including evenings and weekends, and mailing the survey to non-respondents, if an address was available. Despite these attempts,

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[1]The response rate was calculated using Response Rate formula 4 from the American Association for Public Opinion Research (2011). This formula takes into account the number of completed surveys, non-interviews (e.g. refusals, non-contacts) and individuals with unknown ineligibility (e.g. telephone disposition of busy signal or no answer).

[2] Data on the population in out-Wayne and Monroe Counties was obtained from the US Census: http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1&prodType=table

there are some differences between the final sample and the Out-Wayne and Monroe Counties population. Comparing demographic characteristics of the survey sample to 2010 U.S. Census Data for the Out-Wayne and Monroe Counties population[2], we found the following statistically significant differences between the two groups:

- *Gender:* Men were underrepresented in the survey, as compared to the population (survey sample: 33.2%, population: 47.8%) while women were overrepresented (survey sample: 66.8%, population: 52.2%).

- *Race/Ethnicity:* Black/African-American and Latino/Hispanic individuals were underrepresented in the survey (survey sample: 6.7%, population: 11.9% and survey sample: 1.9%, population: 4.1%, respectively). White/Caucasian individuals were overrepresented in the survey sample (survey sample: 84.6%, population: 78.4%).

- *Age:* Younger (ages 18-39 years old) individuals were underrepresented in the survey (survey sample: 19.0%, population: 35.8%) while older individuals (60 years old and older) were overrepresented in the survey, as compared to the population (survey sample: 44.2%, population: 25.2%).

## Qualitative Analysis of Structured Interviews, Key Informant Interviews and Open-ended Items from Focus Group Data and Online Surveys

Several data collection methods were employed during this needs assessment and much of the data collected included qualitative responses to research questions. Qualitative research methods are valuable to researchers as they provide rich descriptions of complex phenomena and illuminate the experiences and interpretation of events by actors with widely differing stakes and roles. Qualitative methods also help researchers generate and test hypotheses (Sofaer, 1999).

In this needs assessment, similar questions were asked across data sources to ensure continuity in data collection and to ensure that responses to questions could be compared across data sources. For example, questions concerning individual perceptions about the "causes" of substance abuse in the community were posed to the following sources: Key Informants, Drug Court, Adult and Adult Co-Occurring interviewees as well as parents, youth and the SEMCA advisory boards.

Once data collection was near completion, similar questions were grouped together and placed in categories. These categories corresponded with basic questions the research team hoped to answer through

[2] Data on the population in out-Wayne and Monroe Counties was obtained from the US Census: http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1&prodType=table

the needs assessment. For example, all questions concerning characteristics of service-provider agencies were grouped together and the sources of, or responses to, each question in this category were listed in a data collection table.

After creation of the qualitative data collection table, investigators agreed upon the most pertinent questions for the needs assessment. Investigators then pulled responses to these questions from the data sources, using the table as a guide, and performed qualitative data analyses.

Documents were compiled incorporating qualitative responses from each source for a given question. In the above example, all answers concerning causes of substance abuse were organized into one document. Next, the research team reviewed the documents and conducted Constant Comparison Analyses. Constant Comparison Analysis, based in grounded theory, generates a theory or set of themes and is commonly used when analyzing narrative or textual data. The first stage, "open coding" was conducted. Open coding chunks data into smaller segments and attaches a descriptor to the segments (Leech & Onwuegbuzie, 2008). For example, in the "causes of substance abuse" document, researchers noticed that biological characteristics (such as heredity, genetic predisposition and familial propensity) were cited by many individuals, from multiple sources, as a cause of substance abuse. Therefore themes or codes concerning genetics, heredity and the like were identified.

Once codes were created for each question document, the research team began the second step of Constant Comparison Analysis, known as axial coding. This coding step groups similar codes into categories (Leech & Onwuegbuzie, 2008). Axial coding for each question was performed by no less than two independent team members to increase inter-rater reliability. Team members coded all responses to a question with the codes developed during open-coding and then compared codes with other team members. Discrepancies were discussed until a consensus was reached on the appropriate code for a given response.

Last, we implemented the final stage of coding, "final selective coding". Final selective coding integrates codes from open and axial coding and refines theory (Leech & Onwuegbuzie, 2008). The frequency of themes or codes is revealed, based on reoccurrence of topics in response to questions and a theory for the "answer" to the question can take shape. For example, if "genetic predisposition/heredity" was the theme or code most frequently cited during selective coding a finding could be developed that states, "across data collection methods heredity and genetic predisposition is the most frequently mentioned cause for substance abuse among this population." In contrast, if "environmental stress" is revealed as a common theme for causes of substance abuse among key informants, law enforcement officials and the SEMCA advisory board, yet "peer pressure" is most often cited as a cause in the consumer interviews, youth and parent focus groups, researchers may develop a theory that states, "consumers of substance abuse treatment have a different view of the causes of substance abuse, compared to substance abuse treatment providers."

## Secondary Data Sources and Analysis

### Socio-demographic Data

Socio-demographic data were collected from the U.S. Census Bureau, Grassroots Governments and the People They Serve (a website), National Association of Towns and Townships. The U.S. Census Bureau website provided state and county quick-facts and was utilized to retrieve data for the socio-demographic table, which provided information for years 2005-2010. The U.S. Census Bureau website provided the data for Wayne County. The American FactFinder website provided decennial census data, American community survey (ACS) data, economic data, and population estimates. American FactFinder provided data about villages, townships, and cities outside of major cities and provided the data for the socio-demographic table for Monroe County. The tables located in chapter 2 contain the data for both Wayne and Monroe County. The Grassroots Government website provided data about how cities and townships vary. The governing structure of Monroe County was retrieved from the 2012 Directory of Monroe County, Michigan, described in the introduction of chapter 2. The governing structure of Wayne County was retrieved from the county's website under the section entitled "About Us."

The data in chapter 2 charts come from the 2010 U.S. Census Bureau's website and the 2005-2009 U.S Census Data from the American Fact Finder website as described above (website addresses in references). Some data for Wayne County were not available from the 2010 Census therefore the 2005-2009 U.S. Census data were used. Information obtained from the earlier Census report includes data for: Belleville, Brownstown Twp, Canton Twp, Grosse Ile Twp, Grosse Point Shores, Northville Twp, Plymouth Twp, Redford Twp, Rockwood, Sumpter Twp and Van Buren Twp. Information for these cities were not readily available at the time of data collection. For example, information was obtained for Northville from the 2010 Census but data was not available for Northville Township. Additionally, the 2010 Census data did not report on education or income variables for Wayne County. Therefore all data in regards to educational attainment and household income in the Wayne County chart are from the 2005-2009 U.S. Census data.

*By Municipality (SEMCOG):* Population data by municipality was obtained from Southeastern Michigan Council of Governments (SEMCOG), Quick Facts: Data by Community (2011). This document was retrieved on September 9, 2011 from http://library.semcog.org/InmagicGenie/DocumentFolder/QuickFacts2010Census.pdf.

*By Zip Code (U.S. Census Fact Finder):* We gathered population data for the zip codes within Out-Wayne County using the U.S. Census Bureau's 2010 Fact Finder website. Raw data was downloaded by selecting Geographies, All 5-Digit ZIP Code Tabulation Areas fully-or-partially within Michigan, and selecting Profile of General Population and Housing Characteristics (DP-1). The population data for each zip code in the SEMCA region was gathered from this downloaded file. This data was retrieved on September 9, 2011 from http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?ref=geo&refresh=t.

*Limitations:* Some data for Wayne County were not available from the 2010 Census when the data was collected; therefore we used the 2005-2009 U.S. Census data. Information obtained from the earlier Census report includes data for: Belleville, Brownstown Twp, Canton Twp, Grosse Ile Twp, Grosse Point Shores, Northville Twp, Plymouth Twp, Redford Twp, Rockwood, Sumpter Twp and Van Buren Twp. Since these data are a bit older, generalizations made on these data must be done with caution. It is possible the socio-demographics of these cities, and Wayne count as a whole, may have changed with the new Census.

## Youth Data

*Michigan Profile for Health Youth (MiPHY):* Youth data were collected through a request to the Michigan Department of Education for all schools participating in the Michigan Profile for Healthy Youth (MiPHY) during the 2009-2010 year within the SEMCA target boundaries. This is a web-based survey for 7th, 9th and 11th graders. The MiPHY survey is anonymous and does not contain any identifying information. It collects data on substance use, perceptions of availability, perceptions of harm, social norms and other risk and protective factors.

Participation in the MiPHY survey is voluntary. Out of 75 public middle and high schools in Out-Wayne County, 15 schools participated in the MiPHY survey. Out of 61,613 enrolled students 5,878 youth took the MiPHY, for a 9.5% participation rate. Although the benchmark data is not a representative sample of all students, the county data reflects responses from almost 6,000 seventh, ninth and eleventh grade students. There are 29 middle and high schools in Monroe County. Within these schools there are approximately 2,526 7th graders, 2,728 9th graders and 3,015 11th graders enrolled; or approximately 8,269 students total. Approximately 39% of those students (3,213) chose to participate in the MiPHY in Monroe County. Participation was highest among 7th graders with 1,436 (57%) participating in the survey. Among 9th and 11th graders, 1,777 (31%) participated in the MiPHY survey.

Additionally, not all school districts participated in all sections offered through the Michigan Profile for Healthy Youth (MiPHY). Specifically for this report, the questions related to suicide and drug use before last sexual intercourse were not collected by all school districts, and therefore there is a much smaller number of youth reporting on these questions.

*Youth Behavior Risk Survey (YBRS) Data:* The Youth Risk Behavior Survey (YRBS) 2009 was used as a state benchmark measure. The 2009 Michigan Youth Risk Behavior Survey: Detailed Results by Item was retrieved on September 9, 2011 from http://www.michigan.gov/documents/mde/09YRBSDetail_327165_7.pdf

In many cases, the YRBS only reported one of the relevant items for one question. For example, only one response for how a youth obtained cigarettes was provided on the YRBS, whereas we report five responses.

*Limitations:* Participation in the MiPHY survey is voluntary and helps to explain in part a 9.5% participation rate. Therefore, while this information can provide a limited picture in relation to the drug-use trends among youth and teens in the SEMCA region, the numbers cannot be generalized to the entire population of youth and teens. An additional limitation is that schools can remove certain sets of questions from their survey. For example, many of the schools did not respond to questions about substance use in relation to sexual activity. Therefore, there are large amounts of missing data in relation to a few questions.

## State Court Administrative Data

Under Michigan law, all adult and juvenile drug treatment courts must collect and provide data to the State Court Administrative Office (SCAO) on each drug-court applicant and participant. The law specifies that SCAO must develop a minimum standard data set for the purpose of preparing an annual legislative report about drug-court performance.

The data collection method used by SCAO involves a 'live' data monitoring system that has each court entering data on individuals screened, assessed and admitted into the drug court. Although the data required by legislators is included in the minimum standard data, there is a larger more comprehensive data collection system of recording and tracking progress through drug court.

The minimum standard data set includes 43 variables that are required for every applicant, whether admitted or rejected. These 43 variables include demographic, crime and substance- abuse related variables that allow comparison of applicants to each other within and between courts. If someone is rejected from the court, there are additional required variables that provide the date of rejection as well as the reason. If the person is admitted, there are additional required variables that provide the date of admission. If a person is admitted into the drug court, there are an additional 55 variables that are required that are specific to case management (i.e. date of service), drug testing and discharge activities.

*Limitations:* Although the database contains a plethora of additional variables that may be of interest to municipalities and SEMCA, many of these fields are scarcely populated. This is because each court decides how they will use the data base and who has access to viewing and/or entering data. In other words, while some courts will use the data system to record additional activities or information than what is required, others will not. No two courts may agree on the same data collection strategies. Therefore, when examining multiple courts, investigation is limited to the required data variables (43 in the pre-admission and 55 in the admission).

In addition, the database lists every admission to the courts. This may include duplicate admissions of a specific person in the same court or multiple courts. Since the data received for this project has been stripped of identifiers, we were not able to assess if we may have the same person in the database with multiple admissions.

## Mortality Data

Data on drug related deaths were gathered from the Wayne County Medical Examiner's Office (WCMEO). This data provides an insight into a specific consequence of substance use. A total of 77 drug-related and documented immediate causes of death were assigned to 591 cases from the WCMEO between 2008 and 2010. From this list, researchers identified 13 categories comparable with other standards for describing mortality data related to substance-use disorders. See Table A.2-A.16 for a complete listing of how the 77 codes were collapsed into 13 categories. There were no alcohol or drug related deaths for Monroe County.

## Table A.2- A.14 Wayne County Medical Examiner's Office Causes of Death

| Table A. 2: Alcohol |
|---|
| 1. Alcohol Abuse, chronic |
| 2. Alcohol and Alprazolm intoxication |
| 3. Alcohol and cocaine abuse/intoxication |
| 4. Alcohol and cocaine intoxication, acute |
| 5. Alcohol and drug abuse/intoxication |
| 6. Alcohol and fentanyl intoxication |
| 7. Alcohol and heroin use, abuse intoxication/acute |
| 8. Alcohol and methadone intoxication, acute |
| 9. Alcohol and opiate use |
| 10. Alcohol and quetiapine intoxication/interaction, acute |
| 11. Alcohol and sertraline abuse |
| 12. Alcohol and Zolpidem intoxication |
| 13. Alcohol intoxication, acute |
| 14. Alcohol, acetaminophen and propxyphene intoxication |
| 15. Alcohol, cocaine and heroin abuse/intoxication |
| 16. Alcohol, cocaine and morphine intoxication |
| 17. Alcohol, cocaine and opiate use |
| 18. Alcohol, cocaine and oxycodone intoxication |
| 19. Alcohol, cocaine and heroin intoxication, acute |
| 20. Alcohol, fentanyl and cocaine abuse |
| 21. Alcohol, hydrocodone and oxycodone abuse |
| 22. Alcoholic cardiomyophathy |
| 23. Alcoholism and alcohol abuse, acute and chronic |

| Table A.3: Cocaine |
|---|
| 1. Cocaine and alprazolam abuse |
| 2. Cocaine and cyclobenzaprine abuse |
| 3. Cocaine and fentanyl intoxication, acute |
| 4. Cocaine and heroin intoxication, acute |
| 5. Cocaine and heroin use, abuse, intoxication |
| 6. Cocaine and methadone abuse |
| 7. Cocaine and morphine abuse/intoxication |
| 8. Cocaine and opiate use, abuse, intoxication |
| 9. Cocaine intoxication, acute |
| 10. Cocaine use, abuse, intoxication |
| 11. Cocaine, diazepam and heroin abuse |

| Table A.4: Heroin |
|---|
| 1. Heroin and methadone intoxication, acute |
| 2. Heroin and oxycodone abuse |
| 3. Heroin intoxication, acute |
| 4. Heroin use, abuse, intoxication |
| 5. Heroin and methadone intoxication, acute |

| Table A.5: Drug Abuse |
|---|
| 1. Drug abuse complicated by gastrointestional hemorrhage |
| 2. Drug use and abuse |

| Table A.6: Fentanyl |
| --- |
| 1. Fentanyl and oxycodone intoxication |
| 2. Fentanyl intoxication |
| 3. Fentanyl intoxication, acute |

| Table A.7: Hydrocodone |
| --- |
| 1. Hydrocodone and methadone intoxication |
| 2. Hydrocodone and morphine intoxication |
| 3. Hydrocodone and oxycodone intoxication |
| 4. Hydrocodone and soma intoxication |
| 5. Hydrocodone and trazodone intoxication |
| 6. Hydrocodone use, abuse and intoxication |

| Table A.8: Morphine |
| --- |
| 1. Morphine intoxication |
| 2. Morphine intoxication, acute |

| Table A.9: Oxycodone |
| --- |
| 1. Oxycodone and alprazolam intoxication |
| 2. Oxycodone and amitripyline intoxication |
| 3. Oxycodone and butalbital intoxication |
| 4. Oxycodone and citalopram intoxication |
| 5. Oxycodone and diphenhydramine abuse |
| 6. Oxycodone and propoxyphene intoxication |
| 7. Oxycodone intoxication, acute |
| 8. Oxycodone use, abuse, intoxication |

| Table A.10: Intravenous |
| --- |
| 1. Intravenous drug abuse, pulmonary complications |

| Table A.11: Methadone |
| --- |
| 1. Methadone and alprazolam intoxication |
| 2. Methadone and diazepam intoxication |
| 3. Methadone and fentanyl intoxication |
| 4. Methadone and fluoxetine intoxication |
| 5. Methadone and heroin intoxication |
| 6. Methadone and propoxyphene intoxication |
| 7. Methadone and quetiapine overdose |
| 8. Methadone and sertraline intoxication |
| 9. Methadone intoxication, acute |
| 10. Methadone use, abuse, intoxication |

| Table A.12: Multiple Drugs |
| --- |
| 1. Multiple drugs and alcohol use, abuse, intoxication |
| 2. Multiple drug intoxication with complications |
| 3. Multiple drug use, abuse, intoxication |

| Table A.13: Prescription Drugs |
| --- |
| 1. Prescription drug abuse |
| 2. Prescription drug abuse, complications |

| Table A.14: Opiate |
| --- |
| 1. Opiate intoxication, complications |
| 2. Opiate use, abuse, intoxication |

*Mortality Maps:* Researchers were asked to provide maps of the SEMCA region which would allow SEMCA administrators to review the data in accordance with municipal boundaries, Mortality and SEMCA Treatment Episodes data contained information that included the participant's city of residence at the time of the event. Using SEMCOG's report (described above), mortality rates and SEMCA treatment rates were created for every 1,000 persons in each municipality. New Boston's population was not included in SEMCOG's report. However, government offices of New Boston confirmed that their population for that report was included in Huron Township's total population. Therefore, we combined our mortality numbers for New Boston with Huron Township and used the population numbers for Huron Township to create the rate per 1,000 persons. SEMCA treatment episodes map had a similar issue. They do not distinguish between New Boston and Huron Township. Likewise, they do not distinguish between Belleville Township and Van Buren Township. Therefore, we combined the treatment episodes of New Boston with Huron Township and used SEMCOG's population numbers that were provided for Huron Township. We combined the population for Belleville Township and Van Buren Township, and used the treatment episodes that were provided for Belleville Township. All maps were created using ArcGIS 9.2 software.

*Limitations:* Only two medical systems were included in these data (Henry Ford Health Systems and Detroit Medical Center). While these systems cover many of the medical providers in Out-Wayne County, there are still others that exist (ex. Oakwood Hospital in Dearborn). Therefore, these data are not exhaustive of those individuals who received treatment for substance related issues.

## Morbidity Data

The number of hospitalizations was collected as an indicator of the substance abuse problem. Data was gathered from two major medical health systems in southeast Michigan: Detroit Medical Center (DMC) Hospital and Henry Ford Health System (see table below for hospitals represented by these two systems). Data was retrieved on hospital discharge diagnoses made during an inpatient stay, coded to the International Classification of Disease, 9$^{th}$ rev., Clinical Modification (ICD-9-CM). Type of payor (third party and Medicaid) and zip code of residence were also requested. This analysis examined discharges with any mention within the top five diagnosis fields related to drug and alcohol use, abuse, and dependence defined as 2910-2929. 5712 and 30300-30593. It is common for research using diagnostic codes to only code the principal diagnosis. However, it is useful to examine secondary and tertiary codes for substance abuse (NIDA, 2006). In many cases where the drug code in not principal, the case may have a mental-health code as principal. Other conditions that may have a secondary code related to alcohol dependence, psychosis or non-dependence abuse are pregnancy, accidental poising and fractures.

Table A.15 Hospitals Represented by Inpatient Data for SEMCA

| Henry Ford Health System Hospitals | |
|---|---|
| Henry Ford West Bloomfield | Henry Ford Macomb – Warren |
| Henry Ford Wyandotte | Cottage Hospital |
| Henry Ford Macomb - Clinton | Maplegrove Center |
| **Detroit Medical Center** | |
| Detroit Receiving Hospital | Hutzel Hospital |
| Harper Hospital | Huron Valley Sinai –Commerce Township |
| Sinai Grace | Rehabilitation Institute of Michigan |
| Children's Hospital of Michigan | |

A total of 95 diagnosis codes were assigned between January 2007 and December of 2010. Of these, four categories were created: 1) disorder, 2) abuse, 3) dependence, and 4) medical/psych co-morbid diagnoses. Table A.16 below provides a complete listing of how the 95 diagnosis codes were collapsed into four categories. The four categories represent standard methods for organizing ICD-9 diagnoses.

*Morbidity Maps:* Both the Henry Ford Health Systems and Detroit Medical Center data were provided by zip code boundaries. Using the US Census 2010 data, we created morbidity rates for every 1,000 persons in each zip code. One zip code in the city of Northville (48167) overlaps three different counties in Southeast Michigan (e.g., 31% of 48167 falls within Wayne County). Therefore, we used 31% of 48167's 2010 population and 31% of the morbidity numbers, to approximate the population and hospital discharges for those that fall within Wayne County.

*Limitations*: Inpatient discharge code records when a person who was admitted to a hospital leaves that hospital. Therefore a person who has been hospitalized more than once a year will be counted multiple times. There are also common limitations in using hospital discharge data, such as inaccuracies in coding for diagnosis. The data that was retrieved for this analysis is also limited to the number of hospitals represented in the data. It does not include all inpatient hospitals in the SEMCA region. For example, this data does not reflect Monroe residents who most likely received care from Mercy Memorial Hospital.

## Substance Abuse Consumer Treatment Secondary Data Analysis

SEMCA Information Technology staff provided the needs-assessment team with Screening, SARF, Admission, Assessment, Utilization and Discharge data files for fiscal years 2008 through 2010. We combined the data files so that data analysis could be done at multiple levels, depending on the particular focus. The smallest unit of analysis was admission. Over the three years there were 17,774 admissions. An admission occurs any time an individual enters treatment or changes to another level of care. The next unit of analysis was episode, which is defined as all admissions from one screening until the next. Multiple admissions were grouped into a single

episode, as long as they all occurred subsequent to the initial screening. The 17,774 admissions were collapsed into 11,791 episodes. The majority of individuals (65.7%) had only one admission within an episode. The number of admissions within an episode ranged from 1 to 5, with an average of 1.51 admissions per episode.

The highest unit of analysis was the individual. There were a total of 9,106 unique individuals who received treatment between 2008 and 2010. Each individual averaged 1.3 episodes and 2.0 admissions. Over three-fourths (79.1%) had only one episode (range=1 to 8) and 55.7% had only one admission (range=1 to 21).

If not analyzed accurately, analysis by admission could duplicate counts of demographics for those individuals with many admissions. To ensure that observations were independent of each other and that each individual's information was not duplicated, the analysis at the individual level included data from the first admission only.

*Limitations:* The analysis of administrative data is valuable because it is a relatively simple way to access a large amount of data, which allows for identifying patterns and forming hypotheses. Because these data are used for billing purposes, the assumption is that fields critical to reimbursement are complete and accurate. The Care Net fields that were examined were not exclusive to billing, but Care Net data were largely complete. SEMCA providers collect a vast amount of data regarding consumers at various stages in their treatment, from their initial screening and admission through their assessment and discharge. This data allowed us to perform a wide variety of analyses on the population as a whole, as well as on subpopulations (e.g., individuals with co-occurring mental health and substance use disorders). The data represent all individuals who are receiving care in the system, and not just a sample, resulting in greater generalizability than data from smaller sources.

Limitations of administrative data in general include potential misclassification and missing data. Although a great deal of effort is made to ensure the quality of the data, the chance for recording or data entry errors exists, and the process of verifying data in administrative databases of this size is impractical. Analysis is generally done with the caveat that there is a margin of error related to the limitations mentioned. Administrative data rarely tell the entire story, and as with analysis of any data source, additional information should be considered to understand the total picture.

Table A.16 Hospital Diagnosis Categories for Morbidity Data

| Disorder Diagnoses | |
|---|---|
| 1. Tobacco Use Disorder | 9. Sed,Hyp,Anxiolytc Ab-Epi |
| 2. Pathologic Alcohol Intox | 10. Sed,Hyp,Anxiolytc Ab-Rem |
| 3. Ac Alcohol Intox-Unspec | 11. Pathologic Drug Intox |
| 4. Ac Alcohol Intox-Contin | 12. Drug-Induced Delirium |
| 5. Ac Alcohol Intox-Episod | 13. Drug-Induced Mood Disord |
| 6. Ac Alcohol Intox-Remiss | 14. Drug-Induced Sleep Disord |
| 7. Sed, Hyp,Anxiolytc Ab-Nos | 15. Drug Mental Disorder Nec |
| 8. Sed,Hyp,Anxiolytc Ab-Con | 16. Drug Mental Disorder Nos |
| **Abuse Diagnoses** | |
| 1. Alcohol Abuse-Unspec | 12. Amphetamine Abuse-Contin |
| 2. Alcohol Abuse-Continuous | 13. Amphetamine Abuse-Episod |
| 3. Alcohol Abuse-Episodic | 14. Amphetamine Abuse-Remiss |
| 4. Alcohol Abuse-In Remiss | 15. Hallucinog Abuse-Unspec |
| 5. Antidepress Abuse-Unspec | 16. Hallucinog Abuse-Contin |
| 6. Antidepress Abuse-Contin | 17. Hallucinog Abuse-Remiss |
| 7. Cocaine Abuse-Unspec | 18. Drug Abuse Nec-Unspec |
| 8. Cocaine Abuse-Continuous | 19. Drug Abuse Nec-Contin |
| 9. Cocaine Abuse-Episodic | 20. Drug Abuse Nec-Episodic |
| 10. Cocaine Abuse-In Remis | 21. Drug Abuse Nec-In Remiss |
| 11. Amphetamine Abuse-Unspec | |
| **Dependence Diagnoses** | |
| 1. Alcohol Withdrawal | 24. Sed,Hyp,Anxiolyt Dep-Epi |
| 2. Alcoh Dep Nec/Nos-Unspec | 25. Sed,Hyp,Anxiolyt Dep-Rem |
| 3. Alcoh Dep Nec/Nos-Contin | 26. Amphetamin Depend-Unspec |
| 4. Alcoh Dep Nec/Nos-Episod | 27. Amphetamin Depend-Contin |
| 5. Alcoh Dep Nec/Nos-Remiss | 28. Amphetamin Depend-Episod |
| 6. Cannabis Depend-Unspec | 29. Amphetamin Depend-Remiss |
| 7. Cannabis Depend-Contin | 30. Hallucinogen Dep-Unspec |
| 8. Cannabis Depend-Episodic | 31. Hallucinogen Dep-Contin |
| 9. Cannabis Depend-Remiss | 32. Hallucinogen Dep-Episod |
| 10. Cocaine Depend-Unspec | 33. Hallucinogen Dep-Remiss |
| 11. Cocaine Depend-Contin | 34. Comb Drug Dep Nec-Unspec |
| 12. Cocaine Depend-Episodic | 35. Comb Drug Dep Nec-Contin |
| 13. Cocaine Depend-Remiss | 36. Comb Drug Dep Nec-Episod |
| 14. Opioid Dependence-Unspec | 37. Comb Drug Dep Nec-Remiss |

| | |
|---|---|
| 15. Opioid Dependence-Contin<br>16. Opioid Dependence-Episod<br>17. Opioid Dependence-Remiss<br>18. Opioid/Other Dep-Unspec<br>19. Opioid/Other Dep-Contin<br>20. Opioid/Other Dep-Episod<br>21. Opioid/Other Dep-Remiss<br>22. Sed,Hyp,Anxiolyt Dep-Nos<br>23. Sed,Hyp,Anxiolyt Dep-Con | 38. Drug Depend Nos-Unspec<br>39. Drug Depend Nos-Contin<br>40. Drug Depend Nos-Remiss<br>41. Drug Depend Nec-Unspec<br>42. Drug Depend Nec-Contin<br>43. Drug Depend Nec-Episodic<br>44. Drug Depend Nec-In Rem<br>45. Drug Withdrawal |
| **Medical/Psych Co-Morbid Diagnoses** | |
| 1. Alcohol Amnestic Disordr<br>2. Alcohol Persist Dementia<br>3. Alcoh Psy Dis W Hallucin<br>4. Alcoh Psych Dis W Delus<br>5. Alcoh Induce Sleep Disor<br>6. Alcohol Mental Disor Nec<br>7. Alcohol Mental Disor Nos | 8. Alcohol Cirrhosis Liver<br>9. Delirium Tremens<br>10. Drug Psych Disor W Delus<br>11. Drug Psy Dis W Hallucin<br>12. Drug Persisting Dementi<br>13. Drug Persist Amnestc Dis |

# Appendix B: SEMCA Socio-Demographic Quartiles

## Table A Total Population – 1st Quartile

| City | Total Population |
|---|---|
| Dearborn | 98,153 |
| Livonia | 96,942 |
| Westland | 84,094 |
| Canton Township | 83,607 |
| Taylor | 63,131 |
| Dearborn Heights | 57,774 |
| Redford Township | 47,047 |
| Lincoln Park | 38,144 |
| Bedford | 31,075 |
| Southgate | 30,047 |
| Brownstown Township | 28,725 |

## Table B Total Population – 2nd Quartile

| City | Total Population |
|---|---|
| Allen Park | 28,210 |
| Garden City | 27,692 |
| Van Buren Township | 26,546 |
| Plymouth Township | 25,959 |
| Wyandotte | 25,883 |
| Inkster | 25,369 |
| Northville Township | 24,846 |
| Romulus | 23,989 |
| Hamtramck | 22,423 |
| Monroe City | 20,733 |
| Trenton | 18,853 |

## Table C Total Population – 3rd Quartile

| City | Total Population |
|---|---|
| Wayne | 17,593 |
| Grosse Pointe Woods | 16,135 |
| Huron Township | 16,078 |
| Harper Woods | 14,236 |
| Woodhaven | 12,875 |
| Riverview | 12,486 |
| Highland Park | 11,776 |
| Grosse Pointe Park | 11,555 |
| Sumpter Township | 11,432 |
| Melvindale | 10,715 |
| Grosse Ile Township | 10,118 |

## Table D Total Population – 4th Quartile

| City | Total Population |
|---|---|
| Flat Rock | 9,878 |
| Ecorse | 9,512 |
| Grosse Pointe Farms | 9,479 |
| Plymouth | 9,132 |
| River Rouge | 7,903 |
| Northville | 5,970 |
| Grosse Pointe City | 5,421 |
| Gibraltar | 4,957 |
| Belleville | 3,653 |
| Rockwood | 3,241 |
| Grosse Pointe Shores | 2,250 |

## Total Population

To help further understand some of the population similarities and differences in Out-Wayne County, the population data is presented in quartiles.

- As seen in table A, cities like Dearborn, Livonia, Westland, and Canton Twp., Taylor, Dearborn Hts., Redford Twp., Lincoln Park, Bedford, Southgate, and Brownstown Twp. fall within the first quartile in terms of total population with total population counts from about 28,700 to 98,000 residents
- Cities with total populations between approx. 28,200 - 10,000 residents lay on the second and third quartile (table B&C)
- Most of the Grosse Pointe's lay on the third and fourth quartile with populations between 18,800 and 28,000 residents; similar to SEMCA's average of 26,000 residents.
- Cities like Flat Rock, Ecorse, Grosse Pointe Farms, Plymouth, River Rouge, Northville, Grosse Pointe City, Gibraltar, Belleville, Rockwood, and Grosse Pointe Shores lay on the fourth quartile and encompass the smallest population totals with less than 10,000 residents.

## Square Miles

To illustrate similarities and differences in Out-Wayne county in regards to square mileage area, cities are presented in quartiles.

- As seen in Tables E cities that lay on the first quartile cover the largest square mileage area within the SEMCA Out-Wayne county region and include Bedford, Sumpter Twp, Canton Twp, Livonia, Romulus, Huron Twp, Van Buren Twp, Dearborn, Taylor, Brownstown Township, and Westland. These cities cover between 20 and 39 square miles.
- Cities that lay on the second and third quartile (tables F&G) represent cities that cover 6 to 16 square miles. Similar to SEMCA's average of 11.9 square miles
- The cities with the least square mile coverage lay on the fourth quartile. These cities all cover less than 3 square miles.

### Table E Square Miles – 1st Quartile

| City | Square Miles |
|---|---|
| Bedford | 39.11 |
| Sumpter Township | 37.57 |
| Canton Township | 36.00 |
| Livonia | 35.70 |
| Romulus | 35.61 |
| Huron Township | 35.57 |
| Van Buren Township | 33.90 |
| Dearborn | 24.23 |
| Taylor | 23.60 |
| Brownstown Township | 22.45 |
| Westland | 20.43 |

### Table F Square Miles – 2nd Quartile

| City | Square Miles |
|---|---|
| Northville Township | 16.45 |
| Plymouth Township | 15.92 |
| Dearborn Heights | 11.74 |
| Redford Township | 11.23 |
| Grosse Ile Township | 9.61 |
| Monroe City | 9.17 |
| Trenton | 7.28 |
| Allen Park | 7 |
| Southgate | 6.85 |
| Flat Rock | 6.53 |
| Woodhaven | 6.39 |

### Table G Square Miles – 3rd Quartile

| City | Square Miles |
|---|---|
| Inkster | 6.25 |
| Wayne | 6.02 |
| Lincoln Park | 5.89 |
| Garden City | 5.87 |
| Wyandotte | 5.27 |
| Riverview | 4.4 |
| Gibraltar | 3.84 |
| Grosse Pointe Woods | 3.25 |
| Highland Park | 2.97 |
| Ecorse | 2.8 |
| Grosse Pointe Farms | 2.75 |

### Table H Square Miles – 4th Quartile

| City | Square Miles |
|---|---|
| Melvindale | 2.72 |
| Rockwood | 2.70 |
| River Rouge | 2.65 |
| Harper Woods | 2.61 |
| Plymouth | 2.21 |
| Grosse Pointe Park | 2.17 |
| Hamtramck | 2.09 |
| Northville | 2.05 |
| Belleville | 1.14 |
| Grosse Pointe City | 1.06 |
| Grosse Pointe Shores | 0.99 |

## Table I Non-white Demographic – 1st Quartile

| City | % non-white |
|---|---|
| Highland Park | 96.8% |
| Inkster | 79.5% |
| River Rouge | 60.6% |
| Ecorse | 56.0% |
| Harper Woods | 50.4% |
| Romulus | 49.5% |
| Hamtramck | 46.4% |
| Melvindale | 33.2% |
| Van Buren Township | 32.4% |
| Westland | 24.2% |
| Wayne | 23.7% |

## Table J Non-white Demographic – 2nd Quartile

| City | % non-white |
|---|---|
| Taylor | 22.0% |
| Canton Township | 21.2% |
| Redford Township | 17.9% |
| Lincoln Park | 15.8% |
| Northville Township | 15.1% |
| Grosse Pointe Park | 15% |
| Dearborn Heights | 13.9% |
| Brownstown Township | 13.2% |
| Belleville | 12.2% |
| Monroe City | 11.6% |
| Southgate | 11.3% |

## Table K Non-white Demographic – 3rd Quartile

| City | % non-white |
|---|---|
| Woodhaven | 11.1% |
| Dearborn | 10.9% |
| Sumpter Township | 9.8% |
| Gibraltar | 9.2% |
| Flat Rock | 8.9% |
| Grosse Pointe Woods | 8.6% |
| Livonia | 8% |
| Grosse Pointe Shores | 7.8% |
| Garden City | 7.5% |
| Allen Park | 7.1% |
| Riverview | 7% |

## Table L Non-white Demographic – 4th Quartile

| City | % non-white |
|---|---|
| Grosse Pointe City | 6.8% |
| Northville | 6.3% |
| Plymouth Township | 6.3% |
| Plymouth | 5.8% |
| Wyandotte | 5.3% |
| Grosse Pointe Farms | 4.6% |
| Trenton | 4.5% |
| Huron Township | 4.3% |
| Grosse Ile Township | 4.2% |
| Bedford | 2% |
| Rockwood | 1.7% |

## Non-white Demographic

To illustrate similarities and differences in between minority demographics in Out-Wayne County, non-white demographics are presented in quartiles.

- As seen in Tables I, J, K, and L below, the cities with the highest representation of non-whites lay on the first quartile and vary greatly from 23% non-white population to 96%.
- The cities that lay on the second and third quartile have between 7% and 11% of non-whites in the resident population.
- The residents who live within the cities on the second quartile have between 11-22% of a non-white populous, which is the average percent of non-white populous for most cities in the SEMCA region.
- The cities in the fourth quartile represent those cities with the least representation of minorities (1-6%).

## Education

To illustrate similarities and differences in education in Out-Wayne County, percentage of residents with a bachelors degree or higher are presented in quartiles.

- Tables M, N, O and P detail the top quartiles for cities where residents possess a bachelors degree or higher.
- The cities that lay on the first quartile include all of the Grosse Pointe's, Northville and Northville Township, Plymouth and Plymouth Township, and Canton Township representing cities with the top percent of residents with a Bachelors Degree or higher.
- The cities that have 33-12.6% of their residents possessing a Bachelors Degree or Higher lay on the second and third quartile and are similar to the SEMCA average of 26% Bachelors degree or higher acquisition.
- The cities that lay on the fourth quartile represent between 12.5-5.5% of those who possess a Bachelors Degree or higher.

### Table M Bachelors Degree or Higher – 1st Quartile

| City | % Bachelors Degree or Higher |
|---|---|
| Grosse Pointe Farms | 70 |
| Northville | 61.9 |
| Grosse Pointe City | 61.7 |
| Grosse Pointe Shores | 59.2 |
| Grosse Pointe Park | 58.4 |
| Grosse Pointe Woods | 55.1 |
| Northville Township | 55 |
| Plymouth | 52.4 |
| Plymouth Township | 50.8 |
| Canton Township | 45.2 |
| Grosse Ile Township | 41.7 |

### Table N Bachelors Degree or Higher – 2nd Quartile

| City | % Bachelors Degree or Higher |
|---|---|
| Livonia | 33.1 |
| Dearborn | 30.1 |
| Van Buren Township | 26.2 |
| Harper Woods | 25.9 |
| Bedford | 23.4 |
| Trenton | 23 |
| Allen Park | 22.4 |
| Belleville | 21.8 |
| Riverview | 21.7 |
| Brownstown Township | 19.3 |
| Redford Township | 19.3 |

### Table O Bachelors Degree or Higher – 3rd Quartile

| City | % Bachelors Degree or Higher |
|---|---|
| Monroe City | 19 |
| Gibraltar | 18.2 |
| Woodhaven | 18.1 |
| Westland | 17.3 |
| Dearborn Heights | 16.9 |
| Southgate | 16.8 |
| Flat Rock | 16 |
| Rockwood | 15.8 |
| Huron Township | 15.4 |
| Wyandotte | 15 |
| Wayne | 12.6 |

### Table P Bachelors Degree or Higher – 4th Quartile

| City | % Bachelors Degree or Higher |
|---|---|
| Inkster | 12.5 |
| Garden City | 11.6 |
| Romulus | 11.6 |
| Hamtramck | 11 |
| Melvindale | 10.4 |
| Sumpter Township | 10.3 |
| Lincoln Park | 9.7 |
| Taylor | 9.2 |
| Highland Park | 7.5 |
| River Rouge | 6.2 |
| Ecorse | 5.5 |

## Median Household Income

To illustrate similarities and differences in median household income in Out-Wayne County, residents presented household incomes are presented in quartiles.

- The median household income of the residents in the first quartile is over $75,000 per year. Also included in this quartile are Grosse Pointe Shores, Farms and Park, Northville and Northville Twp where household incomes are above $90,000 a year.
- The average household income of the residents who reside in the second quartile is between $71,900 and $57,400 per year. These cities median household income is in proximity to SEMCA's regional average of $61,582.
- Average household incomes in the 3rd quartile are between $56,300 and $48,500.
- Median household income of the residents who live within the fourth quartile is between $47,000 and $18,000, these are also the cities with the greatest percentage of residents living in poverty.

Table Q Median Household Income Demographic – 1st Quartile

| City | Median Household Income |
|---|---|
| Grosse Pointe Shores | 150,250 |
| Northville | 107,344 |
| Grosse Pointe Farms | 106,118 |
| Northville Township | 101,863 |
| Grosse Pointe Park | 97,149 |
| Grosse Pointe Woods | 90,073 |
| Plymouth Township | 89,922 |
| Grosse Ile Township | 85,701 |
| Grosse Pointe City | 85,556 |
| Canton Township | 82,874 |
| Plymouth | 76,741 |

Table R Median Household Income Demographic – 2nd Quartile

| City | Median Household Income |
|---|---|
| Livonia | 71,928 |
| Sumpter Township | 64,446 |
| Bedford | 62,991 |
| Brownstown Township | 62,882 |
| Huron Township | 62,591 |
| Woodhaven | 61,826 |
| Gibraltar | 61,726 |
| Flat Rock | 58,583 |
| Trenton | 58,380 |
| Van Buren Township | 57,723 |
| Rockwood | 57,415 |

Table S Median Household Income Demographic – 3rd Quartile

| City | Median Household Income |
|---|---|
| Allen Park | 56,310 |
| Garden City | 55,529 |
| Redford Township | 52,573 |
| Wyandotte | 51,245 |
| Romulus | 50,764 |
| Southgate | 50,363 |
| Dearborn | 48,905 |
| Westland | 48,822 |
| Harper Woods | 48,729 |
| Dearborn Heights | 48,551 |
| Riverview | 48,527 |

Table T Median Household Income Demographic – 4th Quartile

| City | Median Household Income |
|---|---|
| Taylor | 47,236 |
| Lincoln Park | 46,413 |
| Belleville | 44,631 |
| Monroe City | 42,958 |
| Wayne | 42,721 |
| Melvindale | 37,876 |
| Inkster | 34,402 |
| Ecorse | 27,557 |
| River Rouge | 26,682 |
| Hamtramck | 26,008 |
| Highland Park | 18,712 |

## Table U Households Living Below Poverty – 1st Quartile

| City | % of households below poverty |
|---|---|
| Highland Park | 41.5 |
| River Rouge | 33.3 |
| Hamtramck | 33.2 |
| Ecorse | 31.1 |
| Inkster | 19.4 |
| Dearborn | 16.9 |
| Monroe City | 14.9 |
| Melvindale | 13.5 |
| Romulus | 12.3 |
| Taylor | 11.7 |
| Lincoln Park | 10.2 |

## Table V Households Living Below Poverty – 2nd Quartile

| City | % of households below poverty |
|---|---|
| Riverview | 9.4 |
| Flat Rock | 9.1 |
| Sumpter Township | 8.9 |
| Wayne | 8.8 |
| Westland | 8.6 |
| Dearborn Heights | 8.2 |
| Huron Township | 7.8 |
| Wyandotte | 7.8 |
| Brownstown Township | 7.5 |
| Van Buren Township | 7.4 |
| Harper Woods | 7.3 |

## Table W Households Living Below Poverty – 3rd Quartile

| City | % of households below poverty |
|---|---|
| Woodhaven | 5.8 |
| Allen Park | 5.2 |
| Redford Township | 5.2 |
| Garden City | 4.9 |
| Grosse Pointe City | 4.5 |
| Trenton | 4.5 |
| Grosse Pointe Park | 4.2 |
| Canton Township | 3.9 |
| Southgate | 3.8 |
| Bedford | 3.4 |
| Grosse Ile Township | 3.2 |

## Table X Households Living Below Poverty – 4th Quartile

| City | % of households below poverty |
|---|---|
| Rockwood | 3 |
| Gibraltar | 2.8 |
| Grosse Pointe Woods | 2.1 |
| Livonia | 2.1 |
| Belleville | 2 |
| Northville Township | 1.9 |
| Plymouth | 1.8 |
| Grosse Pointe Farms | 1.5 |
| Plymouth Township | 1.3 |
| Grosse Pointe Shores | 0.8 |
| Northville | 0 |

## Households Living Below Poverty

To illustrate similarities and differences in households living below poverty in Out-Wayne County, percentage of population living below poverty are presented in quartiles.

- The number of households living below poverty in the first quartile is between 41.5 & 10.2 percent. Some of the cities representing those with the highest number of households living below poverty include Highland Park, River Rouge, Hamtramck and Ecorse among others.
- Highland Park, River Rouge, Hamtramck, and Ecorse all have households with 31% or more living below the poverty line. These cities have between 3 and 4 times the amount of residents living below poverty as the average in the SEMCA region.
- Those households with the smallest percentage of residents living below poverty are represented in the fourth quartile. Some of these same cities are where those with sufficient income and those with a higher percentage of residents with a Bachelors Degree or higher dwell.

Table Y % Owner Occupied Housing – 1st Quartile

| City | % owner occupied housing |
|---|---|
| Grosse Pointe Farms | 97.8 |
| Grosse Pointe Shores | 97.8 |
| Huron Township | 94.9 |
| Grosse Pointe Woods | 94.2 |
| Grosse Ile Township | 93.2 |
| Sumpter Township | 92.9 |
| Allen Park | 90.2 |
| Livonia | 89.6 |
| Redford Township | 89.5 |
| Bedford | 88.1 |
| Plymouth Township | 85.5 |

Table Z % Owner Occupied Housing – 2nd Quartile

| City | % owner occupied housing |
|---|---|
| Gibraltar | 84.9 |
| Garden City | 84.8 |
| Dearborn Heights | 84.2 |
| Trenton | 83.6 |
| Harper Woods | 82.3 |
| Grosse Pointe City | 81.2 |
| Brownstown Township | 80.2 |
| Canton Township | 80.1 |
| Lincoln Park | 80 |
| Northville Township | 79.7 |
| Northville | 79.4 |

Table AA % Owner Occupied Housing –3rd Quartile

| City | % owner occupied housing |
|---|---|
| Flat Rock | 77.1 |
| Grosse Pointe Park | 77.1 |
| Woodhaven | 76.9 |
| Rockwood | 76.2 |
| Wyandotte | 75.2 |
| Dearborn | 73.5 |
| Romulus | 73.1 |
| Taylor | 72.9 |
| Belleville | 72.3 |
| Southgate | 70.5 |
| Van Buren Township | 70.5 |

Table AB % Owner Occupied Housing – 4th Quartile

| City | % owner occupied housing |
|---|---|
| Plymouth | 69.5 |
| Westland | 68.9 |
| Melvindale | 68.7 |
| Wayne | 65.9 |
| Riverview | 63.1 |
| Monroe City | 61.7 |
| Ecorse | 61 |
| River Rouge | 57.6 |
| Hamtramck | 55.7 |
| Inkster | 55.5 |
| Highland Park | 38.2 |

## Owner-Occupied Housing

To illustrate similarities and differences in owner-occupied housing in Out-Wayne County, percentage of population living in owner-occupied housing are presented in quartiles.

- The Grosse Points, Huron Township, Grosse Ile Township, Sumpter Township, Allen Park, Redford Township, and Livonia average 93% owner occupied housing. These cities have 20% more owner occupied housing than the regional average for SEMCA.
- The cities in the second quartile compose 80-88% owner occupied housing.
- The cities with the lowest percentage of owner occupied housing include all of the cities on the 4th quartile. These cities have between between 69.5% and 38.2% owner occupied housing, SEMCA's average overall in Out-Wayne county is 77% owner occupied housing.

## Appendix C: SEMCA Treatment Episode by Out-Wayne County Population

| | Number of episodes per city | Number of episodes per 1000 | Population 2010 | Population per/1,000 |
|---|---|---|---|---|
| ALLEN PARK | 339 | 12.0 | 28,210 | 28 |
| BELLEVILLE/VAN BUREN TWP | 522 | 15.9 | 32,812 | 33 |
| BROWNSTOWN | 259 | 8.5 | 30,627 | 31 |
| CANTON | 730 | 8.1 | 90,173 | 90 |
| DEARBORN | 813 | 8.3 | 98,153 | 98 |
| DEARBORN HEIGHTS | 824 | 14.3 | 57,774 | 58 |
| ECORSE | 285 | 30.0 | 9,512 | 10 |
| FLAT ROCK | 269 | 27.2 | 9,878 | 10 |
| GARDEN CITY | 548 | 19.8 | 27,692 | 28 |
| GIBRALTAR | 90 | 19.3 | 4,656 | 5 |
| GROSSE ILE | 56 | 5.4 | 10,371 | 10 |
| GROSSE POINTE | 87 | 16.0 | 5,421 | 5 |
| GROSSE POINTE FARMS | 16 | 1.7 | 9,479 | 9 |
| GROSSE POINTE PARK | 20 | 1.7 | 11,555 | 12 |
| GROSSE POINTE SHORES | 1 | 0.3 | 2,929 | 3 |
| GROSSE POINTE WOODS | 8 | 0.5 | 16,135 | 16 |
| HAMTRAMACK | 139 | 6.2 | 22,423 | 22 |
| HARPER WOODS | 96 | 6.7 | 14,236 | 14 |
| HIGHLAND PARK | 428 | 36.3 | 11,776 | 12 |
| HURON TWP/NEW BOSTON | 74 | 4.7 | 15,879 | 16 |
| INKSTER | 619 | 24.4 | 25,369 | 25 |
| LINCOLN PARK | 952 | 25.0 | 38,144 | 38 |
| LIVONIA | 1052 | 10.9 | 96,942 | 97 |
| MELVINDALE | 227 | 21.2 | 10,715 | 11 |
| NORTHVILLE | 113 | 3.6 | 31,236 | 31 |
| PLYMOUTH | 350 | 9.5 | 36,656 | 37 |
| REDFORD | 884 | 18.3 | 48,362 | 48 |
| RIVER ROUGE | 190 | 24.0 | 7,903 | 8 |
| RIVERVIEW | 146 | 11.7 | 12,486 | 12 |
| ROCKWOOD | 87 | 26.5 | 3,289 | 3 |
| ROMULUS | 470 | 19.6 | 23,989 | 24 |
| SOUTHGATE | 467 | 15.5 | 30,047 | 30 |
| SUMPTER TWP | 1 | 0.1 | 9,549 | 10 |
| TAYLOR | 1327 | 21.0 | 63,131 | 63 |
| TRENTON | 303 | 16.1 | 18,853 | 19 |

| | Number of episodes per city | Number of episodes per 1000 | Population 2010 | Population per/1,000 |
|---|---|---|---|---|
| WAYNE | 443 | 25.2 | 17,593 | 18 |
| WESTLAND | 1692 | 20.1 | 84,094 | 84 |
| WOODHAVEN | 123 | 9.6 | 12,875 | 13 |
| WYANDOTTE | 435 | 16.8 | 25,883 | 26 |

* Treatment episodes were only provided from Belleville (Not Van Buren). Due to the extremely high numbers it was assumed that Belleville episodes also included Van Buren Twp, as it is common for Belleville and Van Buren to be reported interchangeably.

** Treatment episodes were only provided for New Boston and not for Huron Township. Population data from SEMCOG is only provided for Huron Twp, and not New Boston. New Boston confirmed that their population numbers were reported with Huron Township. Thus they were collapsed together.

## Treatment Episodes for Monroe County

| Treatment Episodes for Monroe Township and Out-Monroe County | | Population 2010 | # of episodes per 1000 population |
|---|---|---|---|
| | N | | |
| Monroe Township | 961 | 14,568 | 65.9 |
| Out-Monroe | 610 | 6165- | 9.89 |
| Total | 1571 | 20,733 | 7.57 |

- The number of treatment episodes per 1000 population in Monroe County reveals a high rate of treatment episodes for Monroe Township residents at 66 per 1000 population.

## Appendix D: Medicaid and Third Party Payer Rates Per 1,000 by Zip Code

| Zip Code | | Medicaid | | 3rd Party Payer | | Total | | 2010 Pop | Pop per/1,000 |
|---|---|---|---|---|---|---|---|---|---|
| | | *N* | *per1000* | *N* | *per1000* | *N* | *per1000* | | |
| 48101 | Allen Park | 56 | 2.0 | 624 | 22.1 | 680 | 24.1 | 28,200 | 28 |
| 48111 | Belleville | 36 | 0.9 | 598 | 14.1 | 634 | 15.0 | 42,313 | 42 |
| 48120 | Dearborn | 5 | 0.6 | 130 | 15.7 | 135 | 16.3 | 8,274 | 8 |
| 48122 | Melvindale | 62 | 5.8 | 298 | 27.8 | 360 | 33.6 | 10,727 | 11 |
| 48124 | Dearborn | 37 | 1.2 | 633 | 19.9 | 670 | 21.1 | 31,732 | 32 |
| 48125 | Dearborn Heights | 48 | 2.3 | 575 | 27.0 | 623 | 29.3 | 21,273 | 21 |
| 48126 | Dearborn | 123 | 2.6 | 806 | 17.0 | 929 | 19.6 | 47,465 | 47 |
| 48127 | Dearborn Heights | 78 | 2.1 | 813 | 22.3 | 891 | 24.4 | 36,501 | 37 |
| 48128 | Dearborn | 14 | 1.3 | 246 | 23.0 | 260 | 24.3 | 10,682 | 11 |
| 48134 | Flat Rock | 32 | 1.5 | 379 | 17.7 | 411 | 19.2 | 21,408 | 21 |
| 48135 | Garden City | 43 | 1.6 | 511 | 18.5 | 554 | 20.0 | 27,665 | 28 |
| 48138 | Grosse Ile Twp | 2 | 0.2 | 152 | 14.7 | 154 | 14.8 | 10,371 | 10 |
| 48141 | Inkster | 165 | 6.5 | 1053 | 41.5 | 1218 | 48.0 | 25,366 | 25 |
| 48146 | Lincoln Park | 175 | 4.6 | 1292 | 33.9 | 1467 | 38.5 | 38,098 | 38 |
| 48150 | Livonia | 21 | 0.8 | 380 | 14.0 | 401 | 14.8 | 27,127 | 27 |
| 48152 | Livonia | 37 | 1.2 | 475 | 15.2 | 512 | 16.4 | 31,173 | 31 |
| 48154 | Livonia | 20 | 0.5 | 499 | 12.9 | 519 | 13.4 | 38,642 | 39 |
| 48164 | New Boston | 6 | 0.7 | 146 | 15.9 | 152 | 16.6 | 9,175 | 9 |
| 48168 | Northville | 1 | 0.0 | 229 | 10.5 | 230 | 10.6 | 21,781 | 22 |
| 48170 | Plymouth | 18 | 0.5 | 552 | 13.8 | 570 | 14.3 | 39,963 | 40 |
| 48173 | Rockwood | 11 | 0.9 | 272 | 21.4 | 283 | 22.3 | 12,700 | 13 |
| 48174 | Romulus | 47 | 1.5 | 716 | 22.7 | 763 | 24.2 | 31,515 | 32 |
| 48180 | Taylor | 170 | 2.7 | 1688 | 26.7 | 1858 | 29.4 | 63,131 | 63 |
| 48183 | Trenton | 43 | 1.0 | 842 | 19.5 | 885 | 20.5 | 43,182 | 43 |
| 48184 | Wayne | 19 | 1.1 | 390 | 22.1 | 409 | 23.2 | 17,643 | 18 |

| | Zip Code | Medicaid | | 3rd Party Payer | | Total | | 2010Pop | 1,000 |
|---|---|---|---|---|---|---|---|---|---|
| | | *N* | *per1000* | *N* | *per1000* | *N* | *per1000* | | |
| 48185 | Westland | 85 | 1.8 | 1076 | 22.6 | 1161 | 24.4 | 47,618 | 48 |
| 48186 | Westland | 31 | 0.8 | 760 | 20.8 | 791 | 21.7 | 36,506 | 37 |
| 48187 | Canton Twp | 25 | 0.5 | 481 | 9.8 | 506 | 10.3 | 49,148 | 49 |
| 48188 | Canton Twp | 14 | 0.3 | 376 | 9.2 | 390 | 9.5 | 41,025 | 41 |
| 48192 | Wyandotte | 90 | 3.5 | 783 | 30.3 | 873 | 33.7 | 25,883 | 26 |
| 48193 | Riverview | 34 | 2.2 | 261 | 16.7 | 295 | 18.9 | 15,623 | 16 |
| 48195 | Southgate | 68 | 2.3 | 704 | 23.4 | 772 | 25.7 | 30,047 | 30 |
| 48203 | Highland Park | 1922 | 67.7 | 8274 | 291.2 | 10196 | 358.9 | 28,409 | 28 |
| 48212 | Hamtramck | 1643 | 42.1 | 5641 | 144.5 | 7284 | 186.6 | 39,038 | 39 |
| 48218 | River Rouge | 97 | 12.3 | 444 | 56.2 | 541 | 68.5 | 7,903 | 8 |
| 48225 | Harper Woods | 79 | 5.4 | 406 | 27.9 | 485 | 33.3 | 14,554 | 15 |
| 48229 | Ecorse | 142 | 14.9 | 594 | 62.2 | 736 | 77.0 | 9,556 | 10 |
| 48230 | Grosse Pointe | 19 | 1.1 | 401 | 23.6 | 420 | 24.7 | 16,976 | 17 |
| 48236 | Grosse Pointe | 16 | 0.5 | 514 | 16.8 | 530 | 17.3 | 30,607 | 31 |
| 48239 | Redford Twp | 137 | 3.9 | 1259 | 35.4 | 1396 | 39.3 | 35,542 | 36 |
| 48240 | Redford Twp | 54 | 3.0 | 496 | 28.0 | 550 | 31.0 | 17,722 | 18 |

## Appendix E: Core Inpatient Hospital Discharges for Out-Wayne County by City and Year

| Zip Code | | 2007 | | 2008 | | 2009 | | 2010 | | Total | | 2010 Pop | Pop per/1,000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *N* | *per/1,000* | *N* | *per/1,000* | *N* | *per/1,000* | *N* | *per/1,000* | *N* | *per/1,000* | | |
| 48101 | Allen Park | 164 | 5.8 | 119 | 4.2 | 206 | 7.3 | 191 | 6.8 | 680 | 24.1 | 28,200 | 28 |
| 48111 | Belleville | 154 | 3.6 | 188 | 4.4 | 122 | 2.9 | 170 | 4.0 | 634 | 15.0 | 42,313 | 42 |
| 48120 | Dearborn | 36 | 4.4 | 38 | 4.6 | 43 | 5.2 | 18 | 2.2 | 135 | 16.3 | 8,274 | 8 |
| 48122 | Melvindale | 90 | 8.4 | 100 | 9.3 | 63 | 5.9 | 107 | 10.0 | 360 | 33.6 | 10,727 | 11 |
| 48124 | Dearborn | 140 | 4.4 | 205 | 6.5 | 164 | 5.2 | 161 | 5.1 | 670 | 21.1 | 31,732 | 32 |
| 48125 | Dearborn Heights | 183 | 8.6 | 118 | 5.5 | 165 | 7.8 | 157 | 7.4 | 623 | 29.3 | 21,273 | 21 |
| 48126 | Dearborn | 203 | 4.3 | 242 | 5.1 | 261 | 5.5 | 223 | 4.7 | 929 | 19.6 | 47,465 | 47 |
| 48127 | Dearborn Heights | 205 | 5.6 | 220 | 6.0 | 284 | 7.8 | 182 | 5.0 | 891 | 24.4 | 36,501 | 37 |
| 48128 | Dearborn | 47 | 4.4 | 62 | 5.8 | 65 | 6.1 | 86 | 8.1 | 260 | 24.3 | 10,682 | 11 |
| 48134 | Flat Rock | 122 | 5.7 | 90 | 4.2 | 109 | 5.1 | 90 | 4.2 | 411 | 19.2 | 21,408 | 21 |
| 48135 | Garden City | 143 | 5.2 | 136 | 4.9 | 135 | 4.9 | 140 | 5.1 | 554 | 20.0 | 27,665 | 28 |
| 48138 | Grosse Ile Twp | 30 | 2.9 | 52 | 5.0 | 48 | 4.6 | 24 | 2.3 | 154 | 14.8 | 10,371 | 10 |
| 48141 | Inkster | 342 | 13.5 | 339 | 13.4 | 274 | 10.8 | 263 | 10.4 | 1218 | 48.0 | 25,366 | 25 |
| 48146 | Lincoln Park | 291 | 7.6 | 334 | 8.8 | 491 | 12.9 | 351 | 9.2 | 1467 | 38.5 | 38,098 | 38 |
| 48150 | Livonia | 114 | 4.2 | 114 | 4.2 | 95 | 3.5 | 78 | 2.9 | 401 | 14.8 | 27,127 | 27 |
| 48152 | Livonia | 168 | 5.4 | 95 | 3.0 | 108 | 3.5 | 141 | 4.5 | 512 | 16.4 | 31,173 | 31 |
| 48154 | Livonia | 140 | 3.6 | 139 | 3.6 | 143 | 3.7 | 97 | 2.5 | 519 | 13.4 | 38,642 | 39 |
| 48164 | New Boston | 39 | 4.3 | 42 | 4.6 | 50 | 5.4 | 21 | 2.3 | 152 | 16.6 | 9,175 | 9 |
| 48167 | Northville | 15 | 2.1 | 20 | 2.8 | 16 | 2.2 | 15 | 2.1 | 66 | 9.2 | 7,194 | 7 |
| 48168 | Northville | 5 | 0.2 | 5 | 0.2 | 3 | 0.1 | 2 | 0.1 | 15 | 0.7 | 21,781 | 22 |
| 48170 | Plymouth | 135 | 3.4 | 137 | 3.4 | 136 | 3.4 | 162 | 4.1 | 570 | 14.3 | 39,963 | 40 |
| 48173 | Rockwood | 85 | 6.7 | 99 | 7.8 | 61 | 4.8 | 38 | 3.0 | 283 | 22.3 | 12,700 | 13 |

| Zip Code | | 2007 | | 2008 | | 2009 | | 2010 | | Total | | 2010 Pop | Pop per/1,000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *N* | *per/1,000* | *N* | *per/1,000* | *N* | *per/1,000* | *N* | *per/1,000* | *N* | *per/1,000* | *N* | *per/1,000* |
| 48174 | Romulus | 176 | 5.6 | 166 | 5.3 | 226 | 7.2 | 195 | 6.2 | 763 | 24.2 | 31,515 | 32 |
| 48180 | Taylor | 437 | 6.9 | 398 | 6.3 | 514 | 8.1 | 509 | 8.1 | 1858 | 29.4 | 63,131 | 63 |
| 48183 | Trenton | 192 | 4.4 | 225 | 5.2 | 227 | 5.3 | 241 | 5.6 | 885 | 20.5 | 43,182 | 43 |
| 48184 | Wayne | 90 | 5.1 | 90 | 5.1 | 147 | 8.3 | 82 | 4.6 | 409 | 23.2 | 17,643 | 18 |
| 48185 | Westland | 223 | 4.7 | 302 | 6.3 | 358 | 7.5 | 276 | 5.8 | 1159 | 24.3 | 47,618 | 48 |
| 48186 | Westland | 236 | 6.5 | 199 | 5.5 | 183 | 5.0 | 173 | 4.7 | 791 | 21.7 | 36,506 | 37 |
| 48187 | Canton Twp | 123 | 2.5 | 140 | 2.8 | 135 | 2.7 | 108 | 2.2 | 506 | 10.3 | 49,148 | 49 |
| 48188 | Canton Twp | 103 | 2.5 | 88 | 2.1 | 102 | 2.5 | 97 | 2.4 | 390 | 9.5 | 41,025 | 41 |
| 48192 | Wyandotte | 229 | 8.8 | 223 | 8.6 | 230 | 8.9 | 191 | 7.4 | 873 | 33.7 | 25,883 | 26 |
| 48193 | Riverview | 41 | 2.6 | 91 | 5.8 | 78 | 5.0 | 85 | 5.4 | 295 | 18.9 | 15,623 | 16 |
| 48195 | Southgate | 175 | 5.8 | 183 | 6.1 | 179 | 6.0 | 235 | 7.8 | 772 | 25.7 | 30,047 | 30 |
| 48203 | Highland Park | 2685 | 94.5 | 2452 | 86.3 | 2522 | 88.8 | 2537 | 89.3 | 10196 | 358.9 | 28,409 | 28 |
| 48212 | Hamtramck | 1758 | 45.0 | 1888 | 48.4 | 1927 | 49.4 | 1711 | 43.8 | 7284 | 186.6 | 39,038 | 39 |
| 48218 | River Rouge | 116 | 14.7 | 111 | 14.0 | 159 | 20.1 | 155 | 19.6 | 541 | 68.5 | 7,903 | 8 |
| 48225 | Harper Woods | 106 | 7.3 | 141 | 9.7 | 133 | 9.1 | 105 | 7.2 | 485 | 33.3 | 14,554 | 15 |
| 48229 | Ecorse | 135 | 14.1 | 175 | 18.3 | 222 | 23.2 | 204 | 21.3 | 736 | 77.0 | 9,556 | 10 |
| 48230 | Grosse Pointe | 78 | 4.6 | 92 | 5.4 | 157 | 9.2 | 93 | 5.5 | 420 | 24.7 | 16,976 | 17 |
| 48236 | Grosse Pointe | 88 | 2.9 | 140 | 4.6 | 188 | 6.1 | 114 | 3.7 | 530 | 17.3 | 30,607 | 31 |
| 48239 | Redford Twp | 333 | 9.4 | 355 | 10.0 | 345 | 9.7 | 363 | 10.2 | 1396 | 39.3 | 35,542 | 36 |
| 48240 | Redford Twp | 149 | 8.4 | 105 | 5.9 | 147 | 8.3 | 149 | 8.4 | 550 | 31.0 | 17,722 | 18 |

*Highlights:*

- First, Highland Park and Hamtramck are identified as outliers in this morbidity data. Highland Park has rates of morbidity for substance abuse that are, on average, about 6 times greater than other cities. Hamtramck has the second highest morbidity rates in the SEMCA region across the four years. Hamtramck has rates of morbidity for substance abuse that are, on average, about three times greater than other cities with high substance abuse morbidity in the SEMCA region.
- Aside from Hamtramck and Highland Park, Ecorse has the highest rates of substance abuse morbidity when examined across the four years.
- Next, River Rouge has high substance abuse morbidity rates compared to the rest of the SEMCA region and in some years has rates higher than Ecorse.

Additionally, Inkster has morbidity rates that are relatively high compared to the rest of the SEMCA region, although not as high as the cities listed above.

## Core Inpatient Hospital Discharges for Monroe County by Year

| | 2007 | | 2008 | | 2009 | | 2010 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *N* | *per1000* | *N* | *per1000* | *N* | *per1000* | *N* | *per1000* | *N* | *per1000* |
| Monroe City | 99 | 4.8 | 60 | 2.9 | 82 | 4.0 | 117 | 5.6 | 358 | 17.3 |
| Out-Monroe County | 112 | 0.9 | 136 | 1.0 | 101 | 0.8 | 124 | 0.9 | 473 | *3.6* |

- Monroe County has morbidity rates that are relatively low compared to the Out-Wayne County area of the SEMCA region.
- Monroe City has rates of substance abuse morbidity that are higher than Out-Monroe county, but even these rates across 2007-2010 are low compared to Out-Wayne County.

# Appendix F: SEMCA Treatment Clients: Trend Comparisons (Based on First Admission)

| Demographic Characteristic | Total Population N=9,106 | Admission Year | | | |
|---|---|---|---|---|---|
| | | FY 07-08 n=3,678 | FY 08-09 n=2,889 | FY 09-10 n=2,539 | Sig. |
| Gender | | | | | |
| Male | 5631 (61.8%) | 2262 (61.5%) | 1814 (62.8%) | 1555 (61.2%) | NS |
| Female | 3475 (38.2%) | 1416 (38.5%) | 1075 (37.2%) | 984 (38.8%) | |
| Race | | | | | |
| White | 6887 (75.6%) | 683 (18.6%) | 504 (17.4%) | 492 (19.4%) | NS |
| Black | 1679 (18.4%) | 2787 (75.8%) | 2201 (76.2%) | 1899 (74.8%) | |
| Other | 540 ( 5.9%) | 208 (5.7%) | 184 (6.4%) | 148 (5.8%) | |
| Age | 33.6 (11.6) | 34.1 (11.5) | 33.3 (11.5) | 33.1 (11.8) | p<0.01, FY1 vs. all others |
| Marital Status | | | | | |
| Never Married | 6107 (67.1%) | 2415 (65. 7%) | 1945 (67.3%) | 1747 (68.8%) | p<0.01 |
| Married/Cohabiting | 929 (10.2%) | 355 (9.6%) | 296 (10.2%) | 278 (10.9%) | |
| Widowed | 113 ( 1.2%) | 51 (1.4%) | 35 (1.2%) | 27 (1.1%) | |
| Divorced | 1451 (15.9%) | 651 (17.7%) | 447(15.5%) | 353 (13.9%) | |
| Separated | 506 ( 5.6%) | 206 (5.6%) | 166 (5.8%) | 134 (5.3%) | |
| Number of Dependents | | | | | |
| 0 | 1319 (14.5%) | 143 (3.9%) | 377 (13.0%) | 799 (31.5%) | p<0.001 |
| 1 | 5358 (58.8%) | 2526 (68.7%) | 1687 (58.4%) | 1145 (45.1%) | |
| 2 | 1066 (11.7%) | 424 (11.5%) | 360 (12.5%) | 282 (11.1%) | |
| 3+ | 1363 (15.0%) | 585 (15.9%) | 465 (16.1%) | 313 (12.3%) | |
| Child Welfare Involvement | | | | | |
| Yes | 359 ( 3.9%) | 163 (4.4%) | 98 (3.4%) | 98 (3.9%) | |
| No | 8747 (96.1%) | 3515 (95.6%) | 2791 (96.6%) | 2441 (96.1%) | NS |
| Employment | | | | | |
| Full-time | 677 ( 7.4%) | 312 (8.5%) | 215 (7.4%) | 150 (5.9%) | p<0.001 |
| Part-time | 1071 (11.8%) | 472 (12.8%) | 353 (12.2%) | 246 (9.7%) | |
| Unemployed | 5956 (65.4%) | 2504 (68.1%) | 1854 (64.2%) | 1598 (62.9%) | |

# Appendix F: SEMCA Treatment Clients: Trend Comparisons (Based on First Admission)

| Demographic Characteristic | Total Population N=9,106 | Admission Year | | | |
|---|---|---|---|---|---|
| | | FY 07-08 n=3,678 | FY 08-09 n=2,889 | FY 09-10 n=2,539 | Sig. |
| Not in labor force | 1218 (13.4%) | 299 (8.1%) | 411 (14.2%) | 508 (20.0%) | |
| Retired | 184 ( 2.0%) | 91 (2.5%) | 56 (1.9%) | 37 (1.5%) | |
| Education | | | | | |
| <= 8th Grade | 420 ( 4.6%) | 160 (4.3%) | 136 (4.7%) | 124 (4.9%) | NS |
| 9-11th Grade | 2803 (30.8%) | 1157 (31.5%) | 877 (30.4%) | 769 (30.3%) | |
| 12th Grade | 3817 (41.9%) | 1533 (41.7%) | 1260 (43.6%) | 1024 (40.3%) | |
| >12-<16 years | 1751 (19.2%) | 695 (18.9%) | 533 (18.4%) | 523 (20.6%) | |
| 16+ (BS/BA/Grad) | 315 ( 3.5%) | 133 (3.6%) | 83 (2.9%) | 99 (3.9%) | |
| Annual Income | | | | | |
| $0 | 3034 (33.3%) | 1095 (29.8%) | 948 (32.8%) | 991 (39.0%) | p<0.001 |
| $1-$7k | 2952 (32.4%) | 1423 (38.7%) | 898 (31.1%) | 631 (24.9%) | |
| >$7k | 3116 (34.2%) | 1158 (31.5%) | 1041 (36.1%) | 917 (36.1%) | |
| Service Category | | | | | |
| Outpatient | 4065 (44.6%) | 1742 (47.4%) | 1318 (45.6%) | 1005 (39.6%) | p<0.001 |
| Residential-Detox | 2396 (26.3%) | 812 (22.1%) | 831 (28.8%) | 75 (29.7%) | |
| Resid.-Short Term | 832 ( 9.1%) | 409 (11.1%) | 188 (6.5%) | 235 (9.3%) | |
| Resid.-Long Term | 43 ( 0.5%) | 16 (0.4%) | 11 (0.4%) | 16 (0.6%) | |
| Intensive Outpt. | 1770 (19.4%) | 699 (19%) | 541 (18.7%) | 530 (20.9%) | |
| Referral Source | | | | | |
| Self | 6365 (71.5%) | 2672 (76.2%) | 2055 (71.4%) | 1638 (65.0%) | p<0.001 |
| CJ Referral | 1128 (12.7%) | 408 (11.6%) | 350 (12.2%) | 370 (14.7%) | |
| Other | 1411 (15.8%) | 427 (12.2%) | 473 (16.4%) | 511 (20.3%) | |
| Admission LOS | 58.0 (83.8) | 64.2 (98.9) | 58.1 (78.2) | 48.9 (62.6) | p<0.001, All pairs |
| Number of Prior Treatments | | | | | |
| 0 | 3701 (40.6%) | 1286 (35%) | 1228 (42.5%) | 1187 (46.8%) | |
| 1 | 2258 (24.8%) | 957 (26%) | 708 (24.5%) | 593 (23.4%) | p<0.001 |
| 2 | 1184 (13.0%) | 524 (14.3%) | 361 (12.5%) | 299 (11.8%) | |
| 3 | 706 ( 7.8%) | 333 (9.1%) | 207 (7.2%) | 166 (6.5%) | |

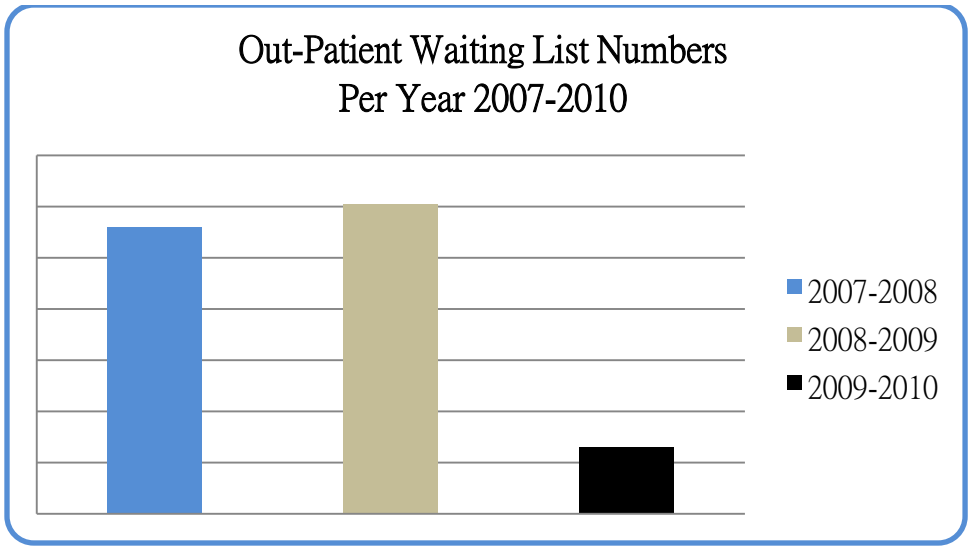
# Appendix F: SEMCA Treatment Clients: Trend Comparisons (Based on First Admission)

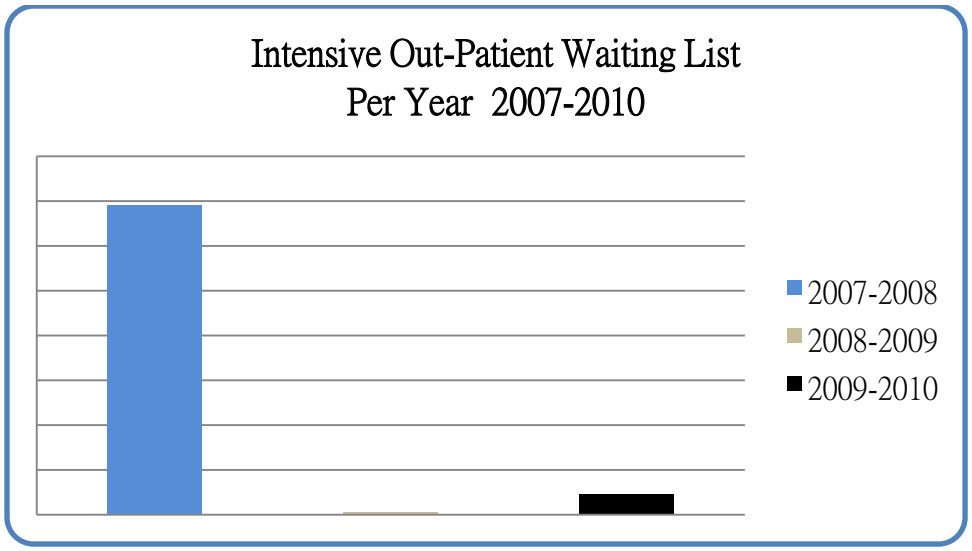
| Demographic Characteristic | Total Population N=9,106 | Admission Year | | | |
|---|---|---|---|---|---|
| | | FY 07-08 n=3,678 | FY 08-09 n=2,889 | FY 09-10 n=2,539 | Sig. |
| 4+ | 1257 (13.8%) | 578 (15.7%) | 385 (13.3%) | 294 (11.6%) | |
| Drug Court Client(Admissions Record) | | | | | |
| Yes | 271 ( 3.0%) | 99 (2.7%) | 82 (2.8%) | 90 (3.5%) | NS |
| No | 8835 (97.0%) | 3579 (97.3%) | 2807 (97.2%) | 2449 (96.5%) | |
| Mental Health Issues (at admission) | | | | | NS |
| Yes | 4360 (47.9%) | 1712 (46.5%) | 1409 (48.8%) | 1239 (48.8%) | |
| No | 4746 (52.1%) | 1966 (53.5%) | 1480 (51.2%) | 1300 (51.2%) | |
| Mental Health Status (at discharge) | | | | | |
| None | 4608 (50.6%) | 1959 (53.3%) | 1388 (48.0%) | 1261 (49.7%) | p<0.001 |
| Mild/Moderate | 4112 (45.2%) | 1545 (42.0%) | 1392 (48.2%) | 1175 (46.3%) | |
| High | 386 ( 4.2%) | 174 (4.7%) | 109 (3.8%) | 103 (4.1%) | |
| # Arrests past 5 years | | | | | |
| 0 | 2909 (32.0%) | 1123 (30.5%) | 886 (30.7%) | 900 (35.5%) | p<0.01 |
| 1 | 2552 (28.0%) | 1046 (28.4%) | 817 (28.3%) | 689 (27.15%) | |
| 2 | 1618 (17.8%) | 654 (17.8%) | 539 (18.7%) | 425 (16.75%) | |
| 3 | 860 ( 9.4%) | 377 (10.3%) | 267 (9.2%) | 216 (8.5%) | |
| 4+ | 1165 (12.8%) | 477 (13.0%) | 380 (13.1%) | 308 (12.1%) | |
| # Arrests past 30 days | | | | | |
| 0 | 8059 (88.5%) | 3257 (88.6%) | 2571 (89.0%) | 2231 (87.9%) | NS |
| 1 | 890 ( 9.8%) | 361 (9.8%) | 269 (9.3%) | 260 (10.2%) | |
| 2+ | 157 ( 1.7%) | 60 (1.6%) | 49 (1.7%) | 48 (1.9%) | |
| Injecting Drug Use | | | | | |
| Yes | 1310 (14.4%) | 471 (12.8%) | 440 (15.2%) | 399 (15.7%) | p<0.01 |
| No | 7796 (85.6%) | 3207 (87.2%) | 2449 (84.8%) | 2140 (84.3%) | |

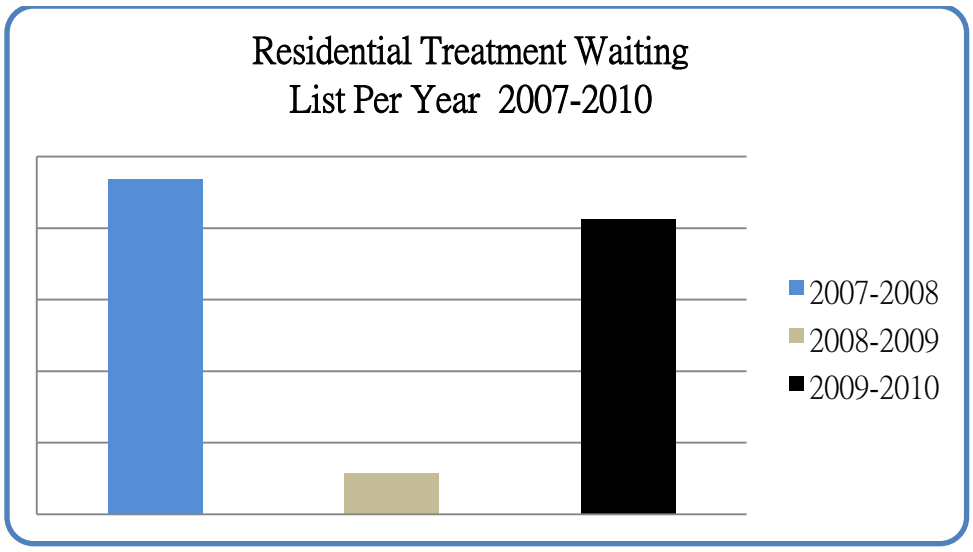
# Appendix F: SEMCA Treatment Clients: Trend Comparisons (Based on First Admission)

| Demographic Characteristic | Total Population N=9,106 | Admission Year | | | |
|---|---|---|---|---|---|
| | | FY 07-08 n=3,678 | FY 08-09 n=2,889 | FY 09-10 n=2,539 | Sig. |
| Primary Substance (from assessment) | | | | | |
| Alcohol | 3553 (39.6%) | 1424 (39.5%) | 1173 (41.0%) | 956 (38.2%) | p<0.001 |
| Cocaine | 1090 (12.1%) | 585 (16.2%) | 287 (10.0%) | 218 (8.7%) | |
| Cannabis | 1359 (15.1%) | 514 (14.2%) | 442 (15.4%) | 403 (16.1%) | |
| Opiates | 2750 (30.6%) | 1009 (28.0%) | 886 (31.0%) | 855 (34.1%) | |
| Other | 223 ( 2.5%) | 76 (2.1%) | 75 (2.6%) | 72 (2.9%) | |

# Appendix G: Outpatient Provider Waiting Lists (2007-2010)



# Appendix H: Discharge Comparisons (Based on First Admission per Patient)

**Definition: Discharge Status**
**Completed:** *Completed Treatment*
**Left:** *Left Against Staff Advice*
**Continue w/Care:** *Continuing in Treatment*
**Other:** *In Jail, Staff Decision from Rules Violation, Death, Mutual Staff/Client Decision, Client Relocated, Program Closed/Merged, Other*

| Demographic Characteristic | Total Population N=9,106 | Discharge Status (percentages reflect row percents) | | | | |
|---|---|---|---|---|---|---|
| | | Completed n=2,482 | Left n=2,404 | Continue n=3,054 | Other n=1,166 | Sig. |
| Gender | | | | | | |
| Male | 5631 (61.8%) | 1646 (29.2%) | 1466 (26.0%) | 1796 (31.9%) | 723 (12.8%) | p<0.0001 |
| Female | 3475 (38.2%) | 836 (24.1%) | 938 (27.0%) | 1258 (36.2%) | 443 (12.7%) | |
| Race | | | | | | |
| White | 6887 (75.6%) | 561 (33.4%) | 466 (27.8%) | 445 (26.5%) | 207 (12.3%) | p<0.0001 |
| Black | 1679 (18.4%) | 1766 (25.6%) | 1800 (26.1%) | 2425 (35.2%) | 896 (13.0%) | |
| Other | 540 ( 5.9%) | 155 (28.7%) | 138 (25.6%) | 184 (34.1%) | 63 (11.7%) | |
| Age | 33.6 (11.6) | 33.7 (12.4) | 32.4 (11.2) | 34.8 (11.2) | 32.4 (11.3) | p<0.0001 Completed vs all other groups Continue vs all other groups |

| Demographic Characteristic | Total Population N=9,106 | Discharge Status (percentages reflect row percents) | | | | |
|---|---|---|---|---|---|---|
| | | Completed n=2,482 | Left n=2,404 | Continue n=3,054 | Other n=1,166 | Sig. |
| Marital Status | | | | | | |
| Never Married | 6107 (67.1%) | 1704 (27.9%) | 1656 (27.1%) | 1951 (32.0%) | 796 (13.0%) | p<0.0001 |
| Married/Cohabiting | 929 (10.2%) | 235 (25.3%) | 268 (28.8%) | 324 (34.9%) | 102 (11.0%) | |
| Widowed | 113 ( 1.2%) | 26 (23.0%) | 36 (31.9%) | 44 (38.9%) | 7 ( 6.2%) | |
| Divorced | 1451 (15.9%) | 380 (26.2%) | 328 (22.6%) | 552 (38.0%) | 191 (13.2%) | |
| Separated | 506 ( 5.6%) | 137 (27.1%) | 116 (22.9%) | 183 (36.2%) | 70 (13.8%) | |
| Number of Dependents | | | | | | |
| 0 | 1319 (14.5%) | 394 (29.9%) | 357 (27.1%) | 400 (30.3%) | 168 (12.7%) | |
| 1 | 5358 (58.8%) | 1460 (27.2%) | 1354 (25.3%) | 1859 (34.7%) | 685 (12.8%) | p<0.01 |
| 2 | 1066 (11.7%) | 275 (25.8%) | 290 (27.2%) | 367 (34.4%) | 134 (12.6%) | |
| 3+ | 1363 (15.0%) | 353 (25.9%) | 403 (29.6%) | 428 (31.4%) | 179 (13.1%) | |
| Child Welfare Involvement | | | | | | |
| Yes | 359 ( 3.9%) | 77 (21.4%) | 117 (32.6%) | 118 (32.9%) | 47 (13.1%) | p<0.05 |
| No | 8747 (96.1%) | 2405 (27.5%) | 2287 (26.1%) | 2936 (33.6%) | 1119 (12.8%) | |
| Employment | | | | | | |
| Full-time | 677 ( 7.4%) | 254 (37.5%) | 190 (28.1%) | 143 (21.1%) | 90 (13.3%) | p<0.0001 |
| Part-time | 1071 (11.8%) | 363 (34.9%) | 306 (28.6%) | 236 (22.0%) | 166 (15.5%) | |
| Unemployed | 5956 (65.4%) | 1377 (23.1%) | 1612 (27.1%) | 2313 (38.8%) | 654 (11.0%) | |
| Not in labor force | 1218 (13.4%) | 417 (34.2%) | 251 (20.6%) | 321 (26.4%) | 229 (18.8%) | |
| Retired | 184 ( 2.0%) | 71 (38.6%) | 45 (24.5%) | 41 (22.3%) | 27 (14.7%) | |

| Demographic Characteristic | Total Population N=9,106 | Discharge Status (percentages reflect row percents) | | | | |
|---|---|---|---|---|---|---|
| | | Completed n=2,482 | Left n=2,404 | Continue n=3,054 | Other n=1,166 | Sig. |
| Education | | | | | | |
| <= 8th grade | 420 ( 4.6%) | 144 (34.3%) | 98 (23.3%) | 111 (26.4%) | 67 (16.0%) | p<0.0001 |
| 9-11th grade | 2803 (30.8%) | 751 (26.8%) | 851 (30.4%) | 842 (30.0%) | 359 (12.8%) | |
| 12th grade | 3817 (41.9%) | 1039 (27.2%) | 975 (25.5%) | 1313 (34.4%) | 490 (12.8%) | |
| >12 - <16 years | 1751 (19.2%) | 454 (25.9%) | 413 (23.6%) | 671 (38.3%) | 213 (12.2%) | |
| 16+ (BS/BA/Grad) | 315 ( 3.5%) | 94 (29.8%) | 67 (21.3%) | 117 (37.1%) | 37 (11.8%) | |
| Annual Income | | | | | | |
| $0 | 3034 (33.3%) | 730 (24.1%) | 756 (24.9%) | 1161 (38.3%) | 387 (12.8%) | p<0.0001 |
| $1-$7k | 2952 (32.4%) | 750 (25.4%) | 833 (28.2%) | 982 (33.3%) | 387 (13.1%) | |
| >$7k | 3116 (34.2%) | 1002 (32.2%) | 815 (26.2%) | 907 (29.1%) | 392 (12.6%) | |
| Service Category | | | | | | |
| Outpatient | 4065 (44.6%) | 1401 (34.5%) | 1390 (34.2%) | 519 (12.8%) | 755 (18.5%) | p<0.0001 |
| Residential-Detox | 2396 (26.3%) | 389 (16.2%) | 415 (17.3%) | 1533 (64.0%) | 59 ( 2.5%) | |
| Resid.-Short Term | 832 ( 9.1%) | 266 (32.0%) | 88 (10.6%) | 411 (49.4%) | 67 ( 8.0%) | |
| Resid.-Long Term | 43 ( 0.5%) | 24 (55.8%) | 8 (18.6%) | 1 ( 2.3%) | 10 (23.3%) | |
| Intensive Outpt. | 1770 (19.4%) | 402 (22.7%) | 503 (28.4%) | 590 (33.3%) | 275 (15.5%) | |
| Referral Source | | | | | | |
| Self | 6365 (71.5%) | 1564 (24.6%) | 1645 (25.8%) | 2378 (37.4%) | 778 (12.2%) | p<0.0001 |
| CJ Referral | 1128 (12.7%) | 477 (42.3%) | 296 (26.2%) | 192 (17.0%) | 163 (14.5%) | |
| Other | 1411 (15.8%) | 380 (26.9%) | 405 (28.7%) | 437 (31.0%) | 189 (13.4%) | |
| Admission LOS | 58.0 (83.8%) | 94.8 (88.7%) | 54.3 (74.9%) | 25.8 (63.6%) | 71.8 (100.7%) | p<0.0001 |

| Demographic Characteristic | Total Population N=9,106 | Discharge Status (percentages reflect row percents) | | | | |
|---|---|---|---|---|---|---|
| | | Completed n=2,482 | Left n=2,404 | Continue n=3,054 | Other n=1,166 | Sig. |
| | | | | | | all pairs sig. |
| Number of Prior Treatments | | | | | | |
| 0 | 3701 (40.6%) | 1123 (30.3%) | 1063 (28.7%) | 1068 (28.8%) | 447 (12.1%) | p<0.0001 |
| 1 | 2258 (24.8%) | 633 (28.0%) | 592 (26.2%) | 753 (33.3%) | 280 (12.4%) | |
| 2 | 1184 (13.0%) | 288 (24.3%) | 276 (23.3%) | 446 (37.7%) | 174 (14.7%) | |
| 3 | 706 ( 7.8%) | 171 (24.2%) | 155 (22.0%) | 273 (38.7%) | 107 (15.2%) | |
| 4+ | 1257 (13.8%) | 267 (21.2%) | 318 (25.3%) | 514 (40.9%) | 158 (12.6%) | |
| Drug Court Client(Admissions Record) | | | | | | |
| Yes | 271 ( 3.0%) | 123 (45.4%) | 66 (24.3%) | 46 (17.0%) | 36 (13.3%) | p<0.0001 |
| No | 8835 (97.0%) | 2359 (26.7%) | 2338 (26.5%) | 3008 (34.0%) | 1130 (12.8%) | |
| Mental Health Issues* (at admission) | | | | | | |
| Yes | 4360 (47.9%) | 849 (19.5%) | 1114 (25.5%) | 1880 (43.1%) | 517 (11.9%) | p<0.0001 |
| No | 4746 (52.1%) | 1633 (34.4%) | 1290 (27.2%) | 1174 (24.7%) | 649 (13.7%) | |
| Mental Health Status* (at discharge) | | | | | | |
| None | 4608 (50.6%) | 1545 (33.5%) | 1304 (28.3%) | 1120 (24.3%) | 639 (13.8%) | p<0.0001 |
| Mild/Moderate | 4112 (45.2%) | 890 (21.6%) | 1013 (24.6%) | 1760 (42.8%) | 449 (10.9%) | |

| Demographic Characteristic | Total Population N=9,106 | Discharge Status (percentages reflect row percents) | | | | |
|---|---|---|---|---|---|---|
| | | Completed n=2,482 | Left n=2,404 | Continue n=3,054 | Other n=1,166 | Sig. |
| High | 386 ( 4.2%) | 47 (12.2%) | 87 (22.5%) | 174 (45.1%) | 78 (20.2%) | |
| # Arrests past 5 years | | | | | | |
| 0 | 2909 (32.0%) | 583 (20.0%) | 809 (27.8%) | 1175 (40.4%) | 342 (11.8%) | p<0.0001 |
| 1 | 2552 (28.0%) | 822 (32.2%) | 617 (24.2%) | 800 (31.3%) | 313 (12.3%) | |
| 2 | 1618 (17.8%) | 549 (33.9%) | 404 (25.0%) | 450 (27.8%) | 215 (13.3%) | |
| 3 | 860 ( 9.4%) | 252 (29.3%) | 233 (27.1%) | 269 (31.3%) | 106 (12.3%) | |
| 4+ | 1165 (12.8%) | 274 (23.5%) | 341 (29.3%) | 360 (30.9%) | 190 (16.3%) | |
| # Arrests past 30 days | | | | | | |
| 0 | 8059 (88.5%) | 2144 (26.6%) | 2173 (27.0%) | 2730 (33.9%) | 1012 (12.6%) | p<0.001 |
| 1 | 890 ( 9.8%) | 283 (31.8%) | 201 (22.6%) | 275 (30.9%) | 131 (14.7%) | |
| 2+ | 157 ( 1.7%) | 55 (35.0%) | 30 (19.1%) | 49 (31.2%) | 23 (17.7%) | |
| Injecting Drug Use | | | | | | |
| Yes | 1310 (14.4%) | 168 (12.8%) | 320 (24.4%) | 708 (54.1%) | 114 ( 8.7%) | p<0.0001 |
| No | 7796 (85.6%) | 2314 (29.7%) | 2084 (26.7%) | 2346 (30.1%) | 1052 (13.5%) | |
| Primary Substance (from assessment) | | | | | | |
| Alcohol | 3553 (39.6%) | 1262 (35.5%) | 788 (22.2%) | 1050 (29.6%) | 453 (12.7%) | p<0.0001 |
| Cocaine | 1090 (12.1%) | 244 (22.4%) | 308 (22.3%) | 366 (33.6%) | 172 (15.8%) | |
| Cannabis | 1359 (15.1%) | 535 (39.4%) | 460 (33.8%) | 160 (11.8%) | 204 (15.0%) | |
| Opiates | 2750 (30.6%) | 369 (13.4%) | 744 (27.1%) | 1361 (49.5%) | 276 (10.0%) | |
| Other | 223 ( 2.5%) | 44 (19.7%) | 61 (27.4%) | 91 (40.8%) | 27 (12.1%) | |

| Demographic Characteristic | Total Population N=9,106 | Discharge Status (percentages reflect row percents) | | | | |
|---|---|---|---|---|---|---|
| | | Completed n=2,482 | Left n=2,404 | Continue n=3,054 | Other n=1,166 | Sig. |
| Agency at Admission: Agencies with higher proportions are listed at the top | | | | | | |
| Hegira Programs Inc. (CAN) | 2271 (24.9%) | 398 (17.5%) | 561 (24.7%) | 1211 (53.3%) | 101 ( 4.5%) | |
| The Guidance Center (ALLEN) | 923 (10.1%) | 267 (28.9%) | 299 (32.4%) | 144 (15.6%) | 213 (23.1%) | |
| Sacred Heart Rehab. (MP) | 834 ( 9.6%) | 15 ( 1.8%) | 62 ( 7.4%) | 729 (87.4%) | 28 ( 3.4%) | |
| Comm. Care Serv. (TAY) | 549 ( 6.0%) | 235 (42.8%) | 161 (29.3%) | 78 (14.2%) | 75 (13.7%) | |
| Eastwood (DB) Auto Club Drive | 483 ( 5.3%) | 109 (22.6%) | 232 (48.0%) | 114 (23.6%) | 28 ( 5.8%) | |
| SAHL/Evangeline - Lawton (DET) | 442 ( 4.9%) | 255 (57.7%) | 111 (25.1%) | 50 (11.3%) | 26 ( 5.9%) | |
| Comm. Care Serv. (LP Outer Dr) | 417 ( 4.6%) | 203 (48.7%) | 116 (27.8%) | 47 (11.3%) | 51 (12.2%) | |
| Catholic Charities of Monroe (CSS MON) | 358 ( 3.9%) | 111 (31.0%) | 167 (46.6%) | 30 ( 8.4%) | 50 (14.0%) | |
| Pers Nursing Lighthouse (PLY) | 340 ( 3.7%) | 112 (32.9%) | 19 ( 5.6%) | 50 (14.7%) | 159 (46.8%) | |
| Hegira Programs Inc. (LIV) | 300 ( 3.3%) | 127 (42.3%) | 82 (27.3%) | 28 ( 9.3%) | 63 (21.0%) | |

| Demographic Characteristic | Total Population N=9,106 | Discharge Status (percentages reflect row percents) | | | | |
|---|---|---|---|---|---|---|
| | | Completed n=2,482 | Left n=2,404 | Continue n=3,054 | Other n=1,166 | Sig. |
| Redford Counseling (RF) | 279 ( 3.1%) | 94 (33.7%) | 99 (35.5%) | 64 (22.9%) | 22 ( 7.9%) | |
| Hegira Programs Inc. (WL) | 239 ( 2.6%) | 64 (26.8%) | 79 (33.1%) | 50 (20.9%) | 46 (19.2%) | |
| Eastwood (LIV) | 219 ( 2.4%) | 75 (34.3%) | 82 (37.4%) | 44 (20.1%) | 18 ( 8.2%) | |
| Beginning Step | 192 ( 2.1%) | 49 (25.5%) | 40 (20.8%) | 66 (34.4%) | 37 (19.3%) | |
| Black Family Dev, (HP) | 136 ( 1.5%) | 32 (23.5%) | 68 (50.0%) | 28 (20.6%) | 8 ( 5.9%) | |
| Eastwood (RO) | 136 ( 1.5%) | 0 ( 0.0%) | 13 ( 9.6%) | 117 (86.0%) | 6 ( 4.4%) | |
| Wolverine Human Services | 109 ( 1.2%) | 98 (89.9%) | 2 ( 1.8%) | 1 ( 0.9%) | 8 ( 7.3%) | |
| Hegira Programs Inc. (ROM) | 97 ( 1.1%) | 36 (37.1%) | 24 (24.7%) | 14 (14.4%) | 23 (23.7%) | |
| ALL OTHER PROVIDERS | 782 ( 8.6%) | 202 (25.8%) | 187 (23.9%) | 189 (24.2%) | 204 (26.1%) | |

# Appendix I: Funded Prevention Programs by Geographic Location

| SERVICE AREA | PROGRAM/SERVICES |
|---|---|
| Belleville, Van Buren, Sumpter Township | • **Creating Lasting Family Connections** is a family-focused program that aims to build the resiliency of youth aged 9 to 17 years and to reduce the frequency of their alcohol and other drug (AOD) use.<br>• **Life Skills** is a classroom prevention education program proven to reduce the risks of alcohol, tobacco, drug abuse, and violence by targeting the major social and psychological factors that promote the initiation of substance use and other risky behaviors.<br>• **Student Assistance** promotes early identification of students having a difficult time in school and provides strategies that will assist them to succeed. The approach is designed to address student behavioral health needs and link them to care services in a school or community setting.<br>• **Technical Assistance** is support offered by trained prevention professionals to aid communities to identify and prioritize their needs, develop action plans, design programs and develop evaluation plans, train volunteers, assist with fund development to sustain programs and services and/or mobilize communities for action.<br>• **Sumpter Community Coalition** will promote a drug free lifestyle and a safe and drug free community for the residents of Sumpter Township. |
| Brownstown | • **Life Skills** is a classroom prevention education program proven to reduce the risks of alcohol, tobacco, drug abuse, and violence by targeting the major social and psychological factors that promote the initiation of substance use and other risky behaviors.<br>• **Aggression Replacement Training** is a cognitive, behavioral intervention program designed to help children and adolescents improve social skill competence and moral reasoning, better manage anger, and reduce aggressive behavior. The program specifically targets chronically aggressive children and adolescents. |
| Dearborn/Dearborn Heights | • **Life Skills** is a classroom prevention education program proven to reduce the risks of alcohol, tobacco, drug abuse, and violence by targeting the major social and psychological factors that promote the initiation of substance use and other risky behaviors.<br>• ***STEP (Systematic Training for Effective Parenting)*** is a multi-component parenting education |

| SERVICE AREA | PROGRAM/SERVICES |
|---|---|
| | curriculum to assist parents in learning effective ways to relate to their children from birth through adolescence.<br>• **Keepin' it REAL** is a multicultural, school-based, substance-use prevention program, designed to help students 12-14 years old assess the risks associated with substance abuse, enhance decision-making and resistance strategies, improve antidrug normative beliefs and attitudes, and reduce substance use.<br>• **Protecting You/Protecting Me (PY/PM)** is classroom-based, alcohol-use prevention and vehicle safety program designed to reduce alcohol-related injuries and deaths among youth due to underage alcohol use and riding in vehicles with drivers who are not alcohol free.<br>• **Hookah Awareness Campaign** is a multi-lingual, community-wide, anti-tobacco campaign designed to educate the community of the dangers associated with hookah and tobacco use, specifically among the Arab-American population.<br>• **Technical Assistance** is support offered by trained prevention professionals to aid communities to identify and prioritize their needs, develop action plans, design programs and develop evaluation plans, train volunteers, assist with fund development to sustain programs and services and/or mobilize communities for action. |
| Ecorse | • **Life Skills** is a classroom prevention education program proven to reduce the risks of alcohol, tobacco, drug abuse, and violence by targeting the major social and psychological factors that promote the initiation of substance use and other risky behaviors.<br>• **Aggression Replacement Training** is a cognitive behavioral intervention program to help children and adolescents improve social skill competence and moral reasoning, better manage anger, and reduce aggressive behavior. The program specifically targets chronically aggressive children and adolescents.<br>• **Technical Assistance** is support offered by trained prevention professionals to aid communities to identify and prioritize their needs, develop action plans, design programs and develop evaluation plans, train volunteers, assist with fund development to sustain programs and services and/or mobilize communities for action. |

| SERVICE AREA | PROGRAM/SERVICES |
|---|---|
| | • Ecorse Substance Abuse Prevention Task Force is focused on addressing the issue of abandoned homes and safety issues that arise from their presence. |
| Flat Rock | • Life Skills is a classroom prevention education program proven to reduce the risks of alcohol, tobacco, drug abuse, and violence by targeting the major social and psychological factors that promote the initiation of substance use and other risky behaviors.<br>• Aggression Replacement Training is a cognitive behavioral intervention program to help children and adolescents improve social skill competence and moral reasoning, better manage anger, and reduce aggressive behavior. The program specifically targets chronically aggressive children and adolescents. |

# Appendix J: Treatment Providers Perceptions of Barriers to Treatment

| | |
|---|---|
| Lack of transportation | 15% (n=96) |
| Lack of insurance coverage/lack of finances | 14% (n=90) |
| Could not afford treatment | 11% (n=66) |
| Insurance did not cover treatment | 10% (n=65) |
| Eligibility problems | 9% (n=55) |
| Clients do not want help | 9% (n=52) |
| Waiting list at providers | 8% (n=47) |
| Do not know who to contact for services | 7% (n=40) |
| Clients experience scheduling conflicts | 5% (n=30) |
| Services available are not appropriate | 4% (n=24) |
| Treatment not available in their community | 4% (n=22) |
| Client's cultural/religious issues | 2% (n=14) |
| Other, please specify | 2% (n=10) |

# Appendix K: Executive Directors Perceptions of Barriers to Treatment

| | |
|---|---|
| Billing and reimbursement issues | 18% (n=16) |
| Psychiatrist or physician staffing | 15% (n=13) |
| Coordination with local mental health agency | 11% (n=10) |
| Mechanisms to ensure linkage and follow-up with local mental health agency | 11% (n=10) |
| Physical resources | 11% (n=10) |
| Other, please specify | 7% (n=6) |
| Evidence-based or preferred practices | 6% (n=5) |
| Staff who are trained to provide mental health services | 5% (n=4) |
| Screening and assessment protocols | 5% (n=4) |
| Management support | 3.5% (n=3) |
| Clinical supervision | 3.5% (n=3) |
| Licensing and regulatory standards | 2% (n=2) |
| Education or training | 2% (n=2) |

# Appendix L: Pharmacist Perceptions- Never Responses

| Question | Sedatives/Hypnotics | Stimulants | Opioids |
|---|---|---|---|
| After doctor's office hours purchase | 16.6% | 28.1% | 13.5% |
| Excessive/repeat prescription at short intervals | 15.3% | 32.3% | 11.1% |
| Falsified prescription | 33.7% | 53.5% | 18.7% |
| "Scamming" by family members (e.g. smurfing) | 37.6% | 54.8% | 30.9% |
| Inappropriate drug for the patient condition | 19.2% | 32.5% | 14.7% |
| Inappropriate combination of several drugs | 13.4% | 34.7% | 10.9% |
| Prescription from non-local source | 23.3% | 35.6% | 17.9% |
| Prescription from multiple sources | 19.8% | 43.5% | 13.5% |
| Excessive number of patients with prescription from one doctor/clinic | 22.4% | 43.1% | 19.3% |