REPORT ON THE EFFECTIVENESS OF TREATMENT PROGRAMS FOR HEROIN AND OTHER OPIATES

(FY2013 Appropriation Bill - Public Act 200 of 2012)

May 15, 2013

Section 498: (1) The department shall use standard program evaluation measures to assess the effectiveness of heroin and other opiates treatment programs provided through coordinating agencies and service providers in reducing and preventing the incidence of substance use disorders. The measures established by the department shall be modeled after the program outcome measures and best practice guidelines for the treatment of heroin and other opiates as prescribed by the federal substance abuse and mental health services administration.

(2) By May 15 of the current fiscal year, the department shall provide a report to the house and senate appropriations subcommittees on community health, the house and senate fiscal agencies, and the state budget office on the effectiveness of treatment programs for heroin and other opiates.

Michigan Department of Community Health

MDCH

Rick Snyder, Governor
James K. Haveman, Director

BUREAU OF SUBSTANCE ABUSE AND ADDICTION SERVICES

APPROPRIATION ACT SECTION 498 REPORT

FISCAL YEAR 2012 ACTIVITIES

Scope

To examine the effectiveness in Michigan of Treatment Programs for Heroin and Other Opiates, it helps to establish the concept that the publically funded Michigan substance use disorder (SUD) treatment and recovery system is designed to allow an entire network of funded providers to deliver services for persons with opiate dependence and abuse. A narrow focus only on methadone provision and medically assisted treatment (MAT) would miss the majority of the settings where treatment for opiates occurs. To examine the overall effectiveness of treatment programs for heroin and other opiates, the full array of providers, along with those providing MAT, is included in this report.

Background

Treatment programs respond to emerging substance use, abuse, and dependence problems. For the past decade, opiate use, particularly opioid pain relievers (OPRs), and the need for opiate-involved treatment have grown at consistent yearly increments. This mirrors a corresponding growth in the number of prescriptions filled for OPRs.

From FY2003 to FY2012, the reported percentage of treatment admissions, supported in whole or in part with MDCH-administered funding, involving synthetic opiates had increased nearly 400%. The reported percentage of treatment admissions for heroin has nearly doubled (*see Figure 1*). These increases support the evaluation that "treatment programs for heroin and other opiates must be expanded beyond methadone and MAT."

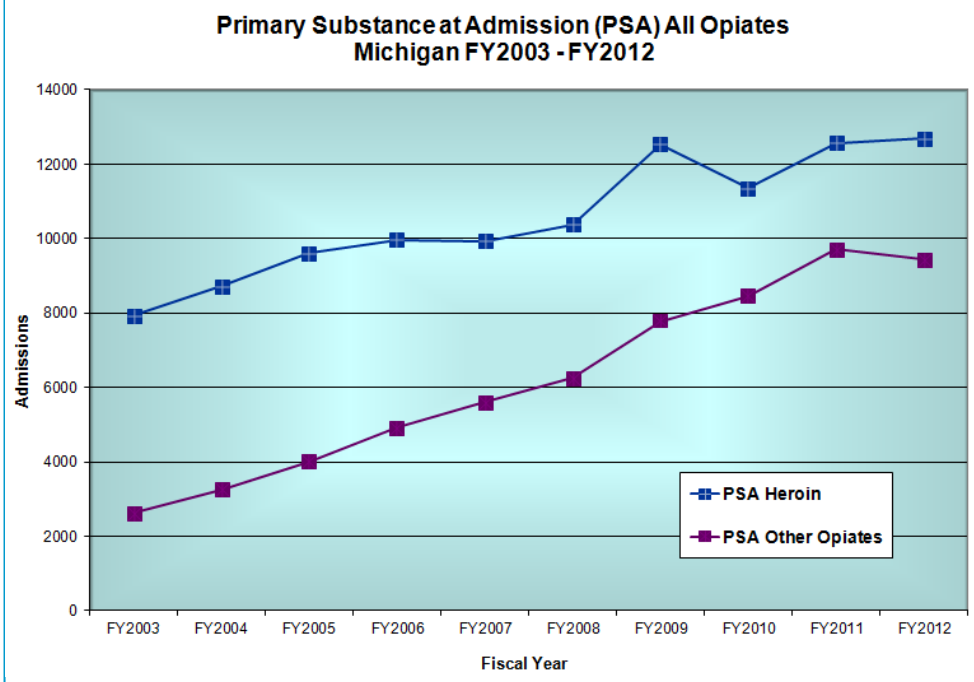

Figure 1

FY2012 Methadone (MAT) Program Admissions

Methadone (MAT) Program Name - City - License Number	FY12 Admits
BIO-MEDICAL BEHAVIORAL HEALTHCARE - WATERFORD - 631295	255
CHERRY STREET SERVICES - GRAND RAPIDS - 410014	229
STAR CENTER INC - DETROIT - 821426	210
NARDIN PARK RECOVERY CENTER - DETROIT - 820198	191
NEW LIGHT RECOVERY CENTER INC - DETROIT - 821624	189
SACRED HEART REHABILITATION CENTER INC - FLINT - 250328	180
SACRED HEART REHABILITATION CENTER - MADISON HEIGHTS - 631337	171
BIO-MED BEHAVIORAL HEALTHCARE, PC - FLINT - 250369	167
BIO MED BEHAVIORAL HEALTH CARE INC - CLINTON TOWNSHIP - 500343	149
VICTORY CLINICAL SERVICES IV - SAGINAW - 730208	141
VICTORY CLINICAL SERVICES L.L.C. - KALAMAZOO - 390114	124
EAST SIDE SUBSTANCE ABUSE CLINIC - MUSKEGON HEIGHTS - 610030	122
UNIVERSITY PHYSICIANS GROUP - DETROIT - 821595	119
METRO EAST TREATMENT, CHALMERS CLINIC #3 - DETROIT - 821237	99
VICTORY CLINICAL SERVICES LANSING - LANSING - 330330	87
VICTORY CLINICAL SERVICES III LLC - JACKSON - 380098	75
MICHIGAN THERAPEUTIC CONSULTANTS, PC - MT. PLEASANT - 370057	73
SACRED HEART REHABILITATION CENTER INC - MEMPHIS - 500044	50
HARBORTOWN TREATMENT CENTER - BENTON HARBOR - 110093	24
YPSILANTI MEDICAL AND DRUG REHABILITATION - YPSILANTI - 810353	24
NORTHWEST INDUSTRIAL DRUG REHABILITATION CLINIC - DETROIT - 822507	9
Total	**2,688**

Figure 2

In FY2012, 21,628 Michigan residents who were admitted to publically funded treatment programs reported opiates (heroin, other opiates, or illicit methadone) as their primary substance of abuse. Of these, 2,688 (12.4%) began methadone maintenance at one of 21 methadone providers (*see Figure 2*), and 1,032 (4.8%) received buprenorphine (Suboxone, Subutex). The majority of persons with opiate dependence or abuse were treated in drug-free outpatient and residential settings.

In fact, in FY2012, there were 248 providers statewide with at least four persons admitted for opiates and 39 of these had at least 100 admissions (*see Figure 3*). This suggests that the entire provider network must have the ability to function as heroin and other opiate treatment programs. As noted, the scope of this network of licensed and accredited providers exceeds the sub-set of MAT providers. As a result, the

Treatment Providers who Admitted at Least 100 Persons for Heroin or Other Opiates during FY2012

(Excludes MAT)

Program Name - City - License Number	FY12 Admits	Program Name - City - License Number	FY12 Admits
QUALITY BEHAVIORAL HEALTH INC - DETROIT - 822273	1,116	CATHOLIC HUMAN SERVICES INC - ALPENA - 40002	181
HEGIRA PROGRAMS INC, AKA OAKDALE RECOVERY CENTER - CANTON - 820242	829	GREAT LAKES RECOVERY CENTER INC, NEW HOPE - SAULT STE MARIE - 170028	168
SELF HELP ADDICTION REHABILITATION, SHAR - DETROIT - 820174	630	DOT CARING CENTERS INC - SAGINAW - 730038	163
JIM GILMORE JR COMMUNITY HEALING CENTER - KALAMAZOO - 390160	503	THE GUIDANCE CENTER - SOUTHGATE - 820051	155
THE SALVATION ARMY TURNING POINT PROGRAMS - GRAND RAPIDS - 410004	485	PERSONALIZED NURSING LIGHT HOUSE INC - PLYMOUTH - 821032	155
DOT CARING CTRS INC - FREELAND - 730098	444	THE RECOVERY CENTER - LANSING - 330337	150
NEW PATHS - HAMILTON - 250374	415	EASTWOOD CLINICS - CLINTON TOWNSHIP - 500060	145
COMMUNITY PROGRAMS INC - WATERFORD - 631281	320	SACRED HEART REHABILITATION CENTER, CLEARVIEW - PORT HURON - 740100	144
CHRISTIAN GUIDANCE CENTER - HIGHLAND PARK - 820317	295	FLINT ODYSSEY HOUSE INC. - FLINT - 250349	136
ADDICTION TREATMENT SERVICES INC - TRAVERSE CITY - 280010	290	ARBOR CIRCLE COUNSELING CENTER - GRAND RAPIDS - 410249	134
COMMUNITY PROGRAMS INC - WATERFORD - 630677	288	THE SALVATION ARMY HARBOR LIGHT SYSTEM - DETROIT - 820103	122
ALLEGIANCE ADDICTION RECOVERY CENTER - JACKSON - 380005	284	WOODWARD COUNSELING INC - FLINT - 250259	121
TEN SIXTEEN RECOVERY NETWORK - MT PLEASANT - 370048	275	PIONEER COUNSELING CENTERS - STERLING HEIGHTS - 500309	121
TURNING POINT RECOVERY CENTER - PONTIAC - 630622	217	SUNRISE CENTRE INC - ALPENA - 40013	119
WOODWARD COUNSELING INC - PONTIAC - 630606	216	GREAT LAKES RECOVERY CENTERS INC - MARQUETTE - 520015	116
SACRED HEART REHABILITATION CENTER INC - WARREN - 500307	203	I.M.P.A.C.T. THE CENTER FOR HUMAN RESOURCES - PORT HURON - 740104	107
HACKLEY LIFE COUNSELING - MUSKEGON - 610004	196	PSYCHOLOGICAL CONSULTANTS OF MICHIGAN - BATTLE CREEK - 130014	102
CATHOLIC CHARITIES OF SHIAWASSEE and GENESEE - FLINT - 250095	194	THE HOME OF NEW VISION - ANN ARBOR - 810265	101
EASTWOOD CLINICS - ROYAL OAK - 630311	190	THE SALVATION ARMY HARBOR LIGHT SYSTEM - MONROE - 580036	100
CYS, CLINTON COUNSELING CENTER - MT CLEMENS - 500017	189		

Figure 3

outcome measures in this report will include all providers who treat opiate dependence/abuse, with specific emphasis on methadone providers. Both of these programs will be compared to the overall treatment population for each selected measure.

Medically Assisted Treatment (MAT)

Opiate-dependent persons typically have a range of medical, psychological, economic, legal, and social problems. Studies by Rounsaville et al. (1982), Khantzian and Treece (1985) and Woody et al. (1983) documented the high proportion of psychiatric diagnoses seen in opiate-dependent persons. Ball and Nurco (1983), among others, have shown higher rates of individual and property crime among opiate-dependent persons. Metzger and Platt (1988) have shown the problems of unemployment and deficits in job-seeking skills among a significant proportion of this population. Studies by Stanton and his colleagues (Stantan, 1979; Stanton et al., 1992) documented the serious family and relationship problems found in opiate-dependent persons. Finally, the problems of AIDS, hepatitis, tuberculosis, and other infectious diseases are widely documented among persons with opiate-dependence, particularly persons who inject drugs.

It is important to note that these problems, rather than opiate use itself, are the major sources of concern to communities. These associated problems are not only a direct drain on local, state, and federal public health budgets but are in turn associated indirectly with the quality of life for affected local communities. MAT can be seen as a service to the opiate-dependent affected individual because it reduces his/her withdrawal symptoms and cravings for opiates. The extent, however, that it is effective in reducing the social harm caused by these associated problems can be considered a public health benefit to society (similar to education and vaccination programs). The potential benefits to the public stem from reductions in the associated problems of crime, loss of productivity, and disproportionate use of medical and social services—and not from reductions in the use of opiates per se.

Three conclusions flow from existing research on the rehabilitative goals of MAT. First, the available national data indicate that opiate-dependent persons at the time of treatment admission typically show a wide range of serious health and social problems in addition to their primary problem of opiate dependence.

Second, data from three decades of controlled clinical trials and field research indicate that opiate-dependent persons show improvement in, if not elimination of, their opiate addiction with the provision of adequate doses of methadone. This improvement, in turn, tends to result in reductions in opiate-related crime and in the direct effects of opiate use such as needle sharing (e.g., in transmission of infectious diseases).

Third, improvements in the important social and self-support areas are at least in part related to the types and amounts of counseling and other professional medical and social services provided during treatment. There is little evidence that, at least at the initiation of MAT, the provision of methadone *by itself* can lead to reductions in other important problem areas of non-opiate drug use, such as alcohol dependence, unemployment, psychiatric problems, and disproportionate use of health care services. Data from the past ten years have shown that counseling and particularly professional health care and social

services can significantly enhance the direct effects of MAT in achieving reductions in opiate use and are essential to achieving the important goals of social rehabilitation for persons with opiate dependence.

One important point to consider is how the length of time a person receives MAT affects outcomes and mortality. A study by Cornish, et al. (2010) looked at how long a person has to be treated (with either methadone or buprenorphine) until there is a statistically significant likelihood that the treatment reduced their mortality risk. Cornish found that persons did not have a significant reduction in mortality until they had been on medication for 30 weeks, and the maximum benefit was not noted until 60-70 weeks or longer. This indicates that lengths of stay over one year are an expectation for effective MAT.

Heroin and Other Opiate Treatment

In FY2012, 6,294 persons received opiate-involved residential (sub-acute) detoxification services. Buprenorphine was involved in 2,421 (38.5%) of those cases. Of these, 4,280 moved immediately from detox to another level of care (i.e. residential, outpatient, case management).

All persons who receive SUD treatment and recovery services are required to develop individualized treatment plans with individualized goals. MDCH does not endorse a standard “program” but rather a coordinated and mutually agreed upon plan that is customized to the particular needs of each individual. Providers must be equipped to handle diverse populations and must be able to treat a wide range of primary, secondary, and/or tertiary drug dependence and abuse, and they must do this in both group and individual settings.

Selected Measures

All persons receiving treatment have their use and demographic information collected at the start of treatment (admission) and at its termination (discharge) via a Treatment Episode Data Set (TEDS) record. MDCH calculates the following seven outcome measures utilizing TEDS matched admission and discharge records:

1) Treatment Duration and Continuation in Outpatient Services
2) Use/Abstinence of Primary Substance
3) Change in Employment Status
4) Change in Living Situation (Homelessness)
5) Arrest History
6) Social Support/Self Help Group Attendance
7) Completion of Treatment Plan Goals and Objectives

For each of these measures, three populations were examined for persons who were discharged during FY2012 (October 1, 2011, through September 30, 2012) using TEDS data: 1) the entire treatment population; 2) the population of persons with opiates as their primary drug, and; 3) the populations of person with MAT as part of treatment.

1) Treatment Duration and Continuation in Outpatient Services

Treatment duration is a measure of the number of days from the first date to the last date of a billable service. Treatment continuation is the percentage of persons who receive a minimum of 3 treatment sessions and 45 days of duration.

Treatment Population Group		Median Length of Stay		Continued Services	Total Clients	Continuation Rate
All Persons		**78 days**		18,790	28,473	**66.0%**
Opiate-Involved		**84 days**		4,727	7,327	**64.5%**
MAT		**216 days**		2,224	2,808	**79.2%**

2) Use/Abstinence of Primary Substance

Use/Abstinence is a measure of the percentage of persons who report no use of their primary substance (PS) with 30 days of their last date of service.

Treatment Population Group		Discharge		
		PS Use	Total	**Use Rate**
All Persons		35,836	51,566	**69.5%**
Opiate-Involved		12,849	18,299	**70.2%**
MAT		1,235	2,808	**44.0%**

3) Change in Employment Status

Change in employment status is a measure of the change in the percentage of persons reporting either full or part time employment from admission to discharge.

Treatment Population Group		Admission				Discharge				Percent Change	
		Employed	Total	Rate		Employed	Total	Rate			
All Persons		7,796	51,566	15.1%		9,500	51,566	18.4%		**21.9%**	**increase**
Opiate-Involved		1,755	18,299	9.6%		2,114	18,299	11.6%		**20.5%**	**increase**
MAT		345	2,808	12.3%		427	2,808	15.2%		**23.8%**	**increase**

4) Change in Living Situation (Homelessness)

Change in living situation is a measure of the change in the percentage of persons reporting being homeless from admission to discharge.

Treatment Population Group		Admission				Discharge				Percent Change	
		Homeless	Total	Rate		Homeless	Total	Rate			
All Persons		6,013	51,566	11.7%		4,202	51,566	8.1%		**-30.1%**	**decrease**
Opiate-Involved		2,158	18,299	11.8%		1,533	18,299	8.4%		**-29.0%**	**decrease**
MAT		114	2,808	4.1%		104	2,808	3.7%		**-8.8%**	**decrease**

5) Arrest History

Arrest history is a measure that compares the change in the percentage of persons arrested within 30 days prior to admission to those arrested while in treatment. The MAT population can sometimes show less positive outcomes for measures like arrests,

because the cases are open for longer durations (making it more likely an arrest will occur during treatment); this can be a function of measurement rather than of performance.

Treatment Population Group	Admission			Discharge			Percent Change	
	Arrests	Total	Rate	Arrests	Total	Rate		
All Persons	4,515	51,566	8.8%	2,839	51,566	5.5%	**-37.1%**	**decrease**
Opiate-Involved	1,196	18,299	6.5%	823	18,299	4.5%	**-31.2%**	**decrease**
MAT	152	2,808	5.4%	259	2,808	9.2%	**70.4%**	**increase**

6) Social Supports (Attendance at Self-Help Groups)

Social support is a measure of the percentage of persons reporting attendance at self-help groups (i.e. Alcoholics and Narcotics Anonymous) at the time of discharge.

Treatment Population Group	Discharge		
	Social Supports	Total	**Rate**
All Persons	20,523	51,566	**39.8%**
Opiate-Involved	7,647	18,299	**41.8%**
MAT	429	2,808	**15.3%**

7) Completion of Treatment Goals and Objectives

Completion of treatment plan goals and objectives is a measure that examines the percentage of reasons for discharge that are reported as “completed.”

Treatment Population Group	Discharge		
	Completed Treatment	Total	**Rate**
All Persons	27,342	51,566	**53.0%**
Opiate-Involved	9,391	18,299	**51.3%**
MAT	645	2,808	**23.0%**

Summary of Measures

For these selected outcome measures, the differences between the overall treatment population and those with opiate dependence and abuse are minimal. For those served in a drug-free setting, the outcomes are similar to those who present with other primary substances of abuse (alcohol, marijuana, cocaine). In all these instances, reported abstinence increased, more persons report full or part time employment and less reported being homeless. There are fewer reported arrests and higher attendance at self-help groups. Both these populations reported completion of their treatment objectives at over 50%. In general, drug free treatment of heroin and other opiates results in similar, positive short-term outcomes.

There are differences with the MAT population. One key factor is evident in the lengths of stay. The median length of stay for MAT is over two and a half times longer for person with opiate dependence or abuse (216 days vs. 84 days). One result is that this longer duration means that arrests have a higher probability that they will occur while the person

is in treatment. This may account for the lone measure (arrest history for MAT) where the direction of aggregate, individual progress from admission to discharge is negative (increase in persons with an arrest).

One other noteworthy observation for the MAT population is the lower percentage 44.0% vs. 70%) of persons reporting abstinence at discharge. The majority of these cases involve persons leaving against staff advice, many instances after 180+ days in MAT. In fact, that points towards an important nuance in evaluating the effectiveness of MAT. The lengths of stay are much longer, and that leads to increased stability for families and communities. Some of the final outcomes, like the completion rates, end up comparatively lower than the rates for services of shorter duration. The lack of a reported completion does not indicate that the treatment was not useful or effective.

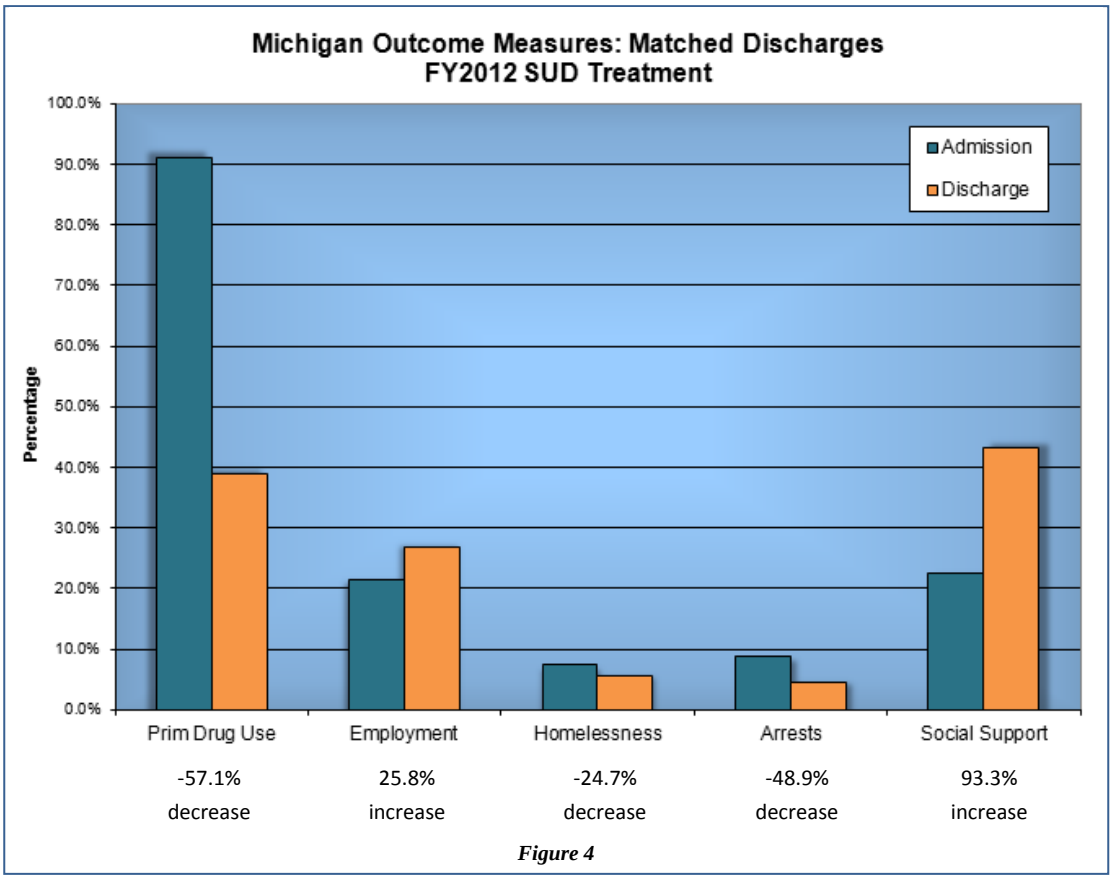

Figure 4

These outcome measures, based on the National Outcome Measures (NOMS) (*see Figure 4*), may not be the most appropriate for evaluating MAT. One of the measures that MDCH may be able to explore in the future, working with physical health data, is the reduced burden on medical services, like non-essential emergency room (ER) visits, that may result. Improved integration of disparate databases may allow for the development of more relevant process and outcome measures. These types of measures would more fully ascertain the impacts of MAT on other service systems.