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### A Need and Fee Assessment Study Concerning Methadone

### For the Florida Department of Children and Families (DCF) Substance Abuse and Mental Health Program Office

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### **Executive Summary**

The Department of Children and Families Office of Substance Abuse and Mental Health (SAMH) are charged with making a determination for methadone medication and maintenance programs on an annual basis. The needs assessment process is outlined in Section 397.427(2)(a) of the Florida Statutes: "Medication-assisted treatment service providers may be established only in response to the Department's determination and publication of need for additional medication-assisted treatment services."

The Florida State University Center for Economic Forecasting and Analysis (FSU CEFA) was contracted by the Florida Department of Children and Families (DCF) to conduct a two pronged study: the first involving methadone needs assessment research, and the second, involving licensure servicing fee analysis research. A goal of the study is to meet the "Determination of Need" minimum requirements established in rule 65D-30.014(3), F.S. The study involved an extensive data collection process, a survey of methadone treatment clinics in Florida (by region), and a needs assessment analysis using the Generalized Estimating Equation (GEE)model.

Presently, Florida has approximately 18,687 substance abuse clients, almost double the number from ten years ago. The growth rate in number of patients over the timeframe from 2002 to 2015 is a little over six percent annually (6.1%), well above the growth rate of the Florida total population. The largest number of patients are located in the Suncoast Region E, with 6,454 patients. Second is the Northeast region with 4,034 patients. Together these two regions represent 56.2 percent of all patients. The fewest number of patients are found in the Southern region. Based on clinic patient count, the top-10 patient locations are outlined in the Table below:

Rank	ZipCode	Count	Zip Codes	Percentage	<b>Cumulative Percent</b>
1	32207	1,340	Jacksonville, FL 32207	7.17%	7.17%
2	33782	1,128	Pinellas Park, FL 33782	6.04%	13.21%
3	33903	1,007	North Fort Myers, FL 33903	5.39%	18.60%
4	32114	1,004	Daytona Beach, FL 32114	5.37%	23.97%
5	32807	998	Azalea Park, FL 32807	5.34%	29.31%
6	32533	884	Cantonment, FL 32533	4.73%	34.04%
7	32204	815	Jacksonville, FL 32204	4.36%	38.40%
8	33760	795	Clearwater, FL 33760	4.25%	42.66%
9	34668	725	Port Richey, FL 34668	46.54%	
10	33605	711	Ybor City, FL 33605	3.80%	50.34%

Concerning the Needs Assessment analysis, the FSU CEFA research team used secondary data from the National Drug Abuse Treatment Survey (DATES) and other sources in addition to the DCF data and Florida Department of Law Enforcement (FDLE) data. Other data sources included the National Facilities Register of the Substance Abuse and Mental Health Services Administration (SAMHSA), US Census Bureau annual survey database, the Office of Economic and Demographic Research (EDR) database, the Florida government list of treatment programs (DCF), and the survey conducted by the research team.

Some of the results of the study include:

- Patients younger than 51 years of age represent 83 percent of the methadone treatment population.
- The overwhelming majority of patients are whites (92 percent).
- The patients' requests for long-term methadone treatment have a high frequency of 89.1 percent.
- The frequency of patients in HMOs or PPOs is 26.7 percent.
- About 14.4 percent of patients are dual diagnosed.
- About 20.4 percent are diagnosed with polysubstance abuse.
- There are about 1.0 percent methadone-related deaths.
- About 1.7 percent have been referred by an emergency room.
- About 14.1 percent of patients are unable to pay for their treatment, while 8.6 percent paid a reduced fee for their treatment.
- Approximately 6.0 percent of the patients required prior authorization, and 16 percent required concurrent review.
- The average waiting time before a patient enters into a methadone treatment program is less than 24 hours.
- The methadone treatment excess demand is expected to be greater than 692 patients statewide for 2015.
- The program staff labor force are currently slightly overutilized (with a staff caseload score greater than 3).

The study findings indicate that the area of greatest excess demand is Region E, SunCoast (two additional clinics) followed by Region B, Northeast (one additional clinic), and Region C, Central (one additional clinic).

### **Project Purpose**

The Florida State University Center for Economic Forecasting and Analysis (FSU CEFA) was contracted by the Florida Department of Children and Families (DCF) to conduct a two pronged study: the first involving methadone needs assessment research, and the second, involving licensure servicing fee analysis research. A goal of the study is to meet the "Determination of Need" minimum requirements established in rule 65D-30.014(3), F.S., as outlined below. There was a previous Needs Assessment study conducted in 2012<sup>1</sup>; however it was requested that a different methodology be used for this study.

### F.S. 65D-30.014(3)

(3) Determination of Need.

(a) Criteria. New providers shall be established only in response to the department's determination of need, which shall occur annually. The determination of need shall only apply to medication and methadone maintenance treatment programs. In its effort to determine need, the department shall examine information on treatment, the consequences of the use of opioids (e.g., arrests, deaths, emergency room mentions, other incidence and prevalence data that may have relevance at the time, etc.), and data on treatment accessibility.

(b) Procedure. The department shall publish the results of the assessment in the Florida Administrative Weekly by June 30. The publication shall direct interested parties to submit applications for licensure to the department's district office where need has been demonstrated and shall provide a closing date for submission of applications. The district office shall conduct a formal rating of applicants on a form titled MEDICATION AND METHADONE MAINTENANCE TREATMENT NEEDS ASSESSMENT, September 6, 2001, incorporated herein by reference. The form may be obtained from the Department of Children and Family Services, Substance Abuse Program Office, 1317 Winewood Boulevard, Tallahassee, Florida 32399-0700. Should the number of responses to the publication for a new provider exceed the determined need, the selection of a provider shall be based on the following criteria:

1. The number of years the respondent has been licensed to provide substance abuse services;

2. The organizational capability of the respondent to provide medication and methadone maintenance treatment in compliance with these rules; and

3. History of substantial noncompliance by the respondent with departmental rules.

FSU CEFA proposed to conduct the needs assessment study based on input data provided by the DCF, in addition to other publicly available sources of data. The overall study will be completed before June 30 2015.

<sup>&</sup>lt;sup>1</sup> See: <u>http://www.dcf.state.fl.us/programs/samh/SubstanceAbuse/docs/MethadoneNeedsAssessment.pdf</u>

### Background

The Department of Children and Families Office of Substance Abuse and Mental Health (SAMH) is responsible for making a determination for methadone medication and maintenance programs on an annual basis. The needs assessment process is outlined in Section 397.427(2)(a) of the Florida Statutes: "Medication-assisted treatment service providers may be established only in response to the Department's determination and publication of need for additional medication-assisted treatment services."

According to a study done by the Substance Abuse and Mental Health Services Administration (SAMHSA) in 2013, 4.5 million people in the United States were documented as using non-prescription pain relievers within the last month. In the same survey, 289,000 people in the United States reported use of heroin in the same time period. Nevertheless, the analysis reported that nearly 80% of these individuals, who fell under categorization of an opioid disorder, were unable to receive treatment due to population, financial, and social barriers (SAMHSA 2014).

The DCF has implemented Methadone Maintenance Treatment (MMT) in order to provide therapeutic rehabilitation to people suffering from addiction to heroin and other opioid drugs. MMT involves administering constant therapeutic doses of Methadone, a synthetic narcotic drug, together with medical, rehabilitative, and counseling services (Final Methadone Needs Assessment Report 2012).

While arguments have arisen within the past four years about the legalization of heroin in order to keep addicts out of the prison system, Methadone treatment is the most widely accepted form of addiction maintenance. When run effectively, methadone-based treatment is cost-effective and safe, and due to its once-a-day regimen, it creates a relatively normal life routine for patients (New York Times 2015).

MMT was initially developed during the 1960s as part of a broad, multicomponent treatment program that also emphasized resocialization and vocational training. (CDC 2002). Though MMT has been a widely-accepted treatment option for upwards of 30 years, its controversial nature has remained constant according to the belief that methadone is merely "the substitution of one addiction for another". In order to address this criticism, MMT was reformed in 2001 under the U.S Department of Health and Human Services (DHHS).

Methadone availability, even with this reform, is still immensely limited. Most reports attribute such limitations to stringent criteria for admission, refusal to administer sufficient

dosages of the drug, or discontinuation of maintenance over time (DRC 1992). Although methadone clinics have been recently growing, the rate of growth doesn't match the rate at which new addicts are entering the population. In the decade between 1997 and 2007, opioid prescriptions increased by 600 percent across the United States (Times Free Press 2013). Currently, DCF licenses about 45 MMT facilities in Florida.

Timely access is not a trivial problem for addicted patients. Many patients are already ambivalent about seeking methadone treatment, have little tolerance for waiting for treatment, and will continue to use drugs while on the waiting lists (Rosenbaum 1995; Graham, Brett, and Bois 1995; Kaplan and Johri 2000). Additionally, several studies suggest that 25–50 percent of applicants will drop off a waiting list between initial assessment and methadone treatment entry, and that longer waiting times increase attrition (Stark, Campbell, and Brinkerhoff 1990; Donovan et al. 2001; Festinger et al. 1995; Hser et al. 1998; Friedmann P. D. et al., 2003; Guydish J. et al., 2011).

Since the 1980s, physician organizations, AIDS activists, addiction experts, and policymakers have advocated for "treatment on demand" as a way to improve the accessibility of needed methadone treatment, which reduces substance-related consequences and costs to society, including the transmission of HIV and crime (Presidential Commission on Human Immunodeficiency Virus 1988; American Medical Association Council on Scientific Affairs 1989; Gerstein and Lewin 1990; McAuliffe et al. 1991; Metzger et al. 1993; Wenger and Rosenbaum 1994; Rosenbaum 1995; Hubbard et al. 1997; Metzger, Navaline, and Woody 1998; Broome, Joe, and Simpson 1999; Leshner 1999; McLellan et al. 2000). This strategy deals with the problem of addiction from the beginning, making methadone treatment available as soon as a substance-abusing person expresses readiness (Friedmann P. D. et al., 2003).

The strategy of "treatment on demand" requires methadone treatment capacity sufficient to minimize waiting lists (Sorensen 2000; Friedmann P. D. et al., 2003; Guydish J. et al., 2011). However, current capacity is considered inadequate to meet the needs in the United States (Guydish and Muck 1999; Guydish J. et al., 2011). As a result, there is a need to improve methadone treatment capacity in the United States. To this end, several cities, including San Francisco, California, and Baltimore, Maryland, initiated policies in the latter half of the 1990s, with the aim of expanding public methadone treatment capacity and providing timely methadone treatment entry, preferably within 48 hours (San Francisco Board of Supervisors 1996; Drug Strategies 2000; Guydish J. et al., 2011).

Concurrently, changes in the delivery system throughout the 1990s, including the market dominance of for-profit behavioral health care, the growing ranks of the uninsured, stringent limitations in coverage for methadone treatment among the insured, and the shift

toward managed care, have heightened apprehension about the accessibility of methadone treatment (Weisner and Schmidt 2001; Wheeler and Nahra 2000; Galanter et al. 2000; Friedmann P. D. et al., 2003). For example, cost containment efforts associated with managed care have dramatically reduced utilization of inpatient addiction care, without evidence of an offsetting increase in outpatient services (Galanter et al. 2000). In addition, the stagnation of public support for methadone maintenance and the reliance on private methadone programs in many communities have raised monetary barriers to many opioid-dependent patients who might benefit from this effective treatment (Rosenbaum et al. 1996). Indeed, some states have attempted to cut or eliminate public funding for methadone treatment program in Massachusetts (Abel 2002).

Despite awareness of methadone treatment accessibility in the United States, little is known about how changes in the delivery system have influenced accessibility among methadone facilities statewide (Florida). Thus, FSU CEFA conducted a needs assessment for methadone maintenance treatment in order to examine the organization-level characteristics of the programs, and to assess accessibility of methadone treatment for "persons in outpatient treatment."

### **Needs Assessment Methodology**

A variety of strategies can be used to conduct a needs assessment. These are divided into two broad categories, quantitative and qualitative. However, taking into account the time and resource considerations of the needs assessment study, and in particular pertaining to this study in Florida, it would be advisable to conduct a needs assessment with quantitative methods (Tutty M. L. and Rothery A. M., 2010).

Through an extensive literature review, we identified three quantitative methods that are typically used to conduct a needs assessment analysis: the Generalized Estimating Equation

(GEE) model, the Geographic Information System (GIS) method, and the 50 Miles Radius method (DCF 2012 Report). These were compared based on the criteria of user-friendliness (ease of applicability), time and cost of implementation, the option to conduct sensitivity analyses and the ability of the method to account for socio-demographic and socio-economic context, multiple listings of patients and the organization-level of the methadone treatment programs. Based on the selection criteria using a ranking scale, the GEE method was selected (see Table 1) to provide a robust needs assessment for the year 2015. An additional justification for our method of choice is given in the following studies conducted in the United States; Linas et al., 2015 have used ecological momentary assessment (EMA) methods with the GEE analysis to ascertain the social, physical, activity and psychosocial environment associated with drug use compared to drug craving in an urban sample of drug users in Baltimore, Maryland. Palepu et al., 2006 used the GEE method in their study to

show evidence of effective current collaboration of addiction treatment and generalized medical care in Boston, Massachusetts. Friedmann et al., 2003 examined organization-level characteristics associated with the accessibility of outpatient addiction treatment, and used the GEE method to address pertinent issues on a state panel. Stitzer ML., 2011 used the GEE method to determine the efficacy of buprenorphine and methadone for relapse prevention among opioid dependent women in the criminal justice (CJ) system transitioning back to the community; their study is one of several studies conducted by SAMHSA's Einstein Experts Meeting Medication Assisted Treatment and the Criminal Justice System in the United States. Dasgupta et al., 2010 used the GEE method to provide their perspectives on the relative safety of buprenorphine and methadone. In their paper, they presented data on post-marketing surveillance for these two opioids and reviewed cases of abuse, misuse, and diversion of methadone and buprenorphine in the United States.

Method	User- Friendliness	Sensitivity Analysis	Timeliness	Cost of Method	Total Score
Statistical Analysis	1	1	1	1	4
Integrated Approach with GIS	1	1	0	0	2
Integrated Approach with 50 miles radius	1	0	0	0	1

### Table 1. Summary of the Comparisons of Needs Assessment Methods

### Data Collection Design

The FSU CEFA research team used secondary data from the National Drug Abuse Treatment Survey (DATES) and other sources in addition to the DCF data and FDLE data. Other data

sources included the National Facilities Register of the Substance Abuse and Mental Health Services Administration (SAMHSA), US Census Bureau annual survey database, the Office of Economic and Demographic Research (EDR) database, the Florida government list of treatment programs (DCF), and the survey conducted by the research team (Table 2). Eligible units identified were divided into 5 strata across two dimensions: public/private ownership, and methadone/non-methadone.

The master database included data ranging from years 2010 to 2015. Due to a lack of availability of digital records from DCF, the research team conducted a survey (online) of a sample of 18 methadone treatment programs selected randomly and evenly distributed across the six regions<sup>2</sup>. The survey instrument is shown in Appendix A. The survey data collected represented additional information on methadone treatment that were not

<sup>&</sup>lt;sup>2</sup> DCF Regions: 1) Northwest 2) Northeast 3) Central 4) Southeast 5) Suncoast 6) Southern

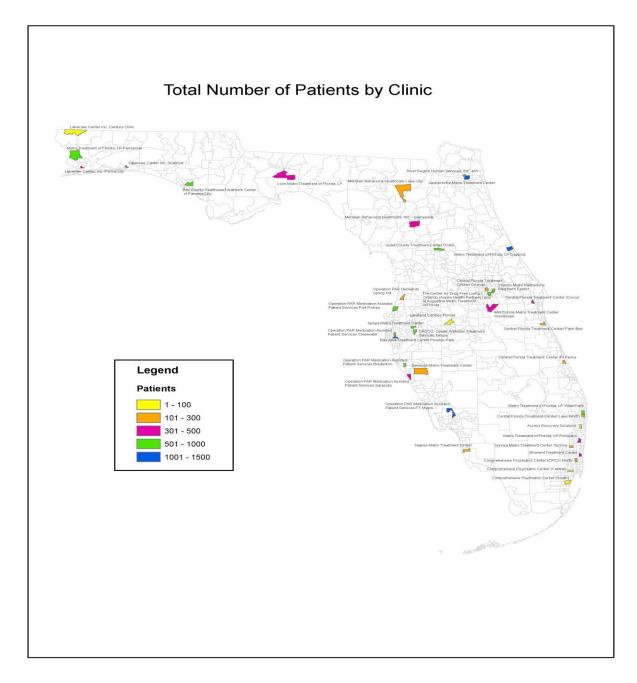
available in the other aforementioned data sources. Based on Florida's sub-regions for each wave of data, samples of programs were screened from composite statewide sample frames (from years 2010 to 2015). Standardized procedures ensure that the composite sampling frame for each wave included the most complete list possible of the state's addiction treatment programs (Adams and Heeringa 2000). Although the survey years ranged from 2010 to 2015, a number of the respondents were not able to provide survey responses for all the years. There were a few reasons cited for the inability to provide responses among the years, primarily due to the high turnover rate of former staff without crossover communication/coordination efforts with incoming staff.

Variables	Measures	Type Of Data	Primary Data	Source	Task
			Clinical supervisors' reports		0000
Dependent Variables	Turned Patients Away	Applicants the program turned away	(addicted to opioids)	Survey	CEFA
	"Treatment on Demand"	Average number of days prospective patients had to wait to enter treatment	Clinical supervisors report (addicted to opioids)	Survey	CEFA
	Study Year	Dummy-coded	Years 2010 - 2015	NA	CEFA
	Program Ownership (Private non- profit; Private for-profit; Local Government; State Government; Federal Government)	Average number of program by program ownership	Program directors' reports	DCF	DCF
		Patients in programs (members of HMOs or PPOs)		Survey	CEFA
	Managed Care Involvement	Patients whose payer required prior authorization	Program directors' reports (addicted to opioids)	Survey	CEFA
		Patients whose payer required concurrent review		Survey	CEFA
		Short-term methadone	Clinical supervisors' reports	Survey	CEFA
	Methadone Provision	Long-term methadone	(Methadone practices)	Survey	CEFA
		No methadone provision		SAMHSA	CEFA
		Patients who were unable to pay for their treatment		Survey	CEFA
		Patients who paid a reduced fee for their treatment		Survey	CEFA
Explanatory or Independent Variables	Delivery of Indigent Care	Patients who were uninsured	Program directors' reports (addicted to opioids)	U.S. Census Bureau	CEFA
independent variables		Patients with public coverage		U.S. Census Bureau	CEFA
		Program age (in years)		DCF	DCF
	Other Program Characteristics	Program size (in number of patients)	Program directors' reports	DCF	DCF
		Perception of staff caseload (rating)	Clinical supervisors' reports	Survey	CEFA
		Demographic features (Age, Race)	Office Economic & Demographic Research	EDR	CEFA
		Patients with polysubstance abuse		Survey	CEFA
		Patient by gender	Substance Abuse and Mental Health Information System	CEFA	CEFA
	Patient Characteristics	Patients with dual diagnoses		Survey	CEFA
		Patients who had problems with alcohol	Substance Abuse and Mental Health Information System	DCF	CEFA
		Patients referred from the criminal justice system	Local Law Enforcement	FDLE	CEFA
		Patients referred from the Emergency Room		SAMHSA	CEFA
		Substance Abuse-related Death		Survey	CEFA

### Table 2. Summary of Data Types Needed for Years (2011, 2012, 2013, 2014 and 2015 if available)

### **Methadone Patient Characteristics**

The CEFA research team collected current data (2015) regarding Methadone patients based on the National Survey of Substance Abuse Treatment Services (N-SSATS<sup>3</sup>). The total patient count, by facility is shown in the Figure and Table below.



### Figure 1. Total Number of Methadone Treatment Program Patients by Clinic, 2015<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> See: <u>http://www.samhsa.gov/data/substance-abuse-facilities data-nssats</u>

OTP No	Methadone Treatment Program Name (not including detox only)	Zip Code	Patient Count 1/31/2015
FL10148M	Access Recovery Solutions	33484	15
FL10098M	Bay Area Treatment Center Pinellas Park	33782	1128
FL10135M	Bay County HealthcareTreatment Center of Panama City	32405	629
FL10051M	Broward Treatment Center	33020	402
FL10084M	Central Florida Treatment Center /Cocoa	32922	378
FL10132M	Central Florida Treatment Center /Ft Pierce	34950-4884	201
FL10130M	Central Florida Treatment Center/Lake Worth	33461	188
FL10080M	Central Florida Treatment Center/ Orlando	32804	292
FL10124M	Central Florida Treatment Center/Palm Bay	32905	261
FL10107M	Comprehensive Psychiatric Center (Central)	33126	57
FL10077M	Comprehensive Psychiatric Center (CPC) - North	33169	106
FL10074M	Comprehensive Psychiatric Center (South)	33157	81
FL10067M	DACCO, Opiate Addiction Treatment Services Tampa	33605	711
FL10093M	Jacksonville Metro Treatment Center	32207	1340
FL10087M	Lakeland Centres Florida	33805	99
FL10140M	Lakeview Center Inc. Century Clinic	32535	57
FL10119M	Lakeview Center Inc. Shalimar	32579	238
FL10059M	Lakeview Center, Inc. Pensacola	32501-2141	316
FL10109M	Leon Metro Treatment of Florida, LP	32305	370
FL10134M	Meridian Behavioral Healthcare Lake City	32025	144
FL10127M	Meridian Behavioral Healthcare, Inc Gainesville	32608	361
FL10088M	Metro Treatment of Florida, LP Daytona	32114	1004
FL10110M	Metro Treatment of Florida, LP Pensacola	32533	884
FL10073M	Metro Treatment of Florida, LP Pompano	33069	406
FL10072M	Metro Treatment of Florida, LP West Palm	33406	528
FL10112M	Mid Florida Metro Treatment Center Kissimmee	34744	398
FL10112M	Naples Metro Treatment Center	34112	260
FL10140M	Operation PAR Hernando Spring Hill	34606-4312	298
FL10141M	Operation PAR Medication Assisted Patient Services Bradenton	34207	695
FL10050M	Operation PAR Medication Assisted Patient Services Bradenon	33760	795
FL10001M	Operation PAR Medication Assisted Patient Services Clearwater	33903	1007
FL10113M		34668	725
FL10108M FL10137M	Operation PAR Medication Assisted Patient Services Port Richey Operation PAR Medication Assisted Patient Services Sarasota		333
(FL10137M)	Operation PAR Medication Assisted Patient Services Sarasota	34231	333
satellite)	Operation PAR Port Charlotte Satellite	33953	No Data
(FL10061	Operation PAR Fort Charlotte Satenite	33733	NO Data
Satellite)	Operation PAR St Peterburg Satellite	33705	No Data
FL10085M	Orlando Metro Methadone Treatment Center	32807	998
FL10005M	Quad County Treatment Center Ocala	34470	593
FL10090M FL10066M	River Region Human Services, Inc. JAX	32204	815
(FL10066M	River Region Human Services, Inc. JAX	52204	015
Satellite)	River Region Human Services, Inc. JAX Satellite	32073	No Data
FL10138M	Sarasota Metro Treatment Center	34240	238
FL10130M	St Augustine Metro Treatment of Florida	32806	379
(FL10098M	strugustile Metro Treatment of Florida	52000	317
Satellite)	St Petersburg Metro satellite	33709	No Data
FL10125M	Sunrise Metro Treatment Center Sunrise	33322	238
	Tampa Metro Treatment Center	33604	562
FI 10002M			
FL10092M FL10062M	The Center for Drug Free Living / Orlando (Aspire Health P	32806	157

### Table 3. Methadone Treatment Program Name and Patient Count, 2015

<sup>4</sup> Figure by FSU ISPA Florida Resources and Environmental Analysis Center

Presently, Florida has 18,687 methadone treatment clients, almost double the number of ten years ago. Figure 2 shows the development of number of clients in facilities with OTP (Methadone) in the state of Florida during the timeframe from 2002 through 2015.<sup>5</sup>

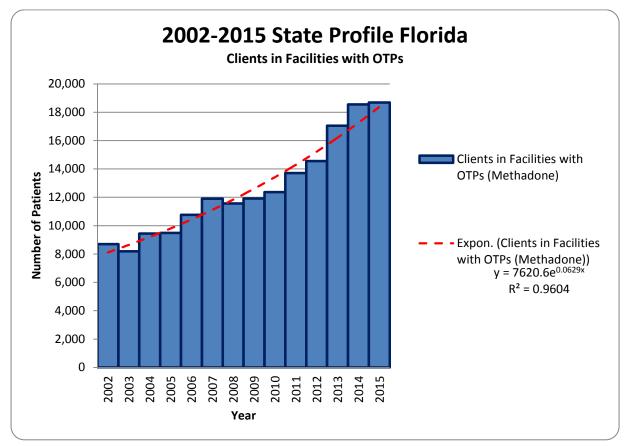


Figure 2: Number of Clients in Facilities with OTP (Methadone), State of Florida, Years 2002 through 2015

The growth rate in number of patients over the timeframe depicted is a little over six percent annually (6.1%), which is much greater than the growth rate of the Florida total population. Table 4 provides the top-10 patient locations searched by zip code first and combining the top searches into the same cities.

<sup>&</sup>lt;sup>5</sup> National Survey of Substance Abuse Treatment Services (N-SSATS), Clients in Facilities with OTPs (Methadone), data retrieved from <u>http://www.samhsa.gov/data/substance-abuse-facilities</u> data-nssats. Date for 2013 through 2015 are unpublished data, source; Central Registry.

Rank	ZipCode	COUNT	Search by ZIP Code	Percent	Cumulative Percent	Percent by Group
1	32401	104	Panama City	0.64%	0.64%	
	32404	148	Panama City	0.91%	1.56%	
	32405	115	Panama City	0.71%	2.27%	2.27%
2	32086	357	Saint Augustine	2.21%	4.47%	4.47%
3	33781	123	Pinellas Park	0.76%	5.23%	
	33782	194	Pinellas Park	1.20%	6.43%	6.43%
4	32807	245	Azalea Park	1.51%	7.94%	
5	34207	224	Bradenton	1.38%	9.33%	
6	34668	224	Port Richey	1.38%	10.71%	10.71%
7	33604	121	Tampa	0.75%	11.46%	
	33612	83	Tampa	0.51%	11.97%	11.97%
8	33760	199	Clearwater	1.23%	13.20%	13.20%
9	34652	100	New Port Richey	0.62%	13.82%	
	34653	97	New Port Richey	0.60%	14.42%	14.42%
10	33322	136	Fort Lauderdale	0.84%	15.26%	15.26%

Table 4. Top-10 Patient Location by Zip-code and City, Count, Percentage andCumulative Percentage

The majority of patients are concentrated in certain area's/cities of Florida. A similar approach, for Top-10 clinics based on per Clinic Patient Count as of January 31, 2015 is depicted in Table 5.

Table 5. Top-10 Patient Location by Clinic Patient Count, Percentage and Cumulative
Percentage

Rank	ZipCode	Count	Search by ZIP Code	Percent	Cumulative Percent
1	32207	1,340	Jacksonville, FL 32207	7.17%	7.17%
2	33782	1,128	Pinellas Park, FL 33782	6.04%	13.21%
3	33903	1,007	North Fort Myers, FL 33903	5.39%	18.60%
4	32114	1,004	Daytona Beach, FL 32114	5.37%	23.97%
5	32807	998	Azalea Park, FL 32807	5.34%	29.31%
6	32533	884	Cantonment, FL 32533	4.73%	34.04%
7	32204	815	Jacksonville, FL 32204	4.36%	38.40%
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9	34668	725	Port Richey, FL 34668	3.88%	46.54%
10	33605	711	Ybor City, FL 33605	3.80%	50.34%

The following Table provides the regional clinics and patient numbers.

	57	106	81											244
Region F Southern	Comprehensive Psychiatric Center (Central)	Comprehensive Psychiatric Center (CPC) - North	Comprehensive Psychiatric Center (South)											
	1,128	711	795	260	695	1,007	725	333		0	238	0	562	6,454
Region E Suncoast	Bay Area Treatment Center Pinellas Park	DACCO, Opiate Addiction Treatment Services Tampa	Operation PAR Medication Assisted Patient Services Clearwater	201 Naples Metro treatment Center	Operation PAR Medication Assisted 406 Patient Services Bradenton	Operation PAR Medication Assisted 528 Patient Services FT Myers	Operation PAR Medication Assisted Patient Services Port Richey	Operation PAR Medication Assisted Patient Services Sarasota	Operation PAR Port Charlotte MAPS Satellite Clinic	Operation PAR -St Petersburg Satellite Clinic	Sarasota Metro Treatment Center	St Petersburg Metro Treatment Center	Tampa Metro Treatment Center	
	402	188	238	201	406	528	15							1,978
Region D Southeast	Broward Treatment Center	Central Florida Treatment Center/ Lake Worth	Sunrise Treatment Center Sunrise	Central Florida Treatment Center /Ft Pierce	Metro Treatment of Florida, LP Pompano	Metro Treatment of Florida, LP West Palm	Access Recovery Solutions, LLC							
	378	292	398	261	298	66	593	157	998					3,474
Region C Central	Central Florida Treatment Center /Cοαa	Central Florida Treatment Center/ Orlando	Mid Florida Metro Treatment Center Kissimmee	Central Florida Treatment 144 Center/ Palm Bay	Operation PAR ( MAPS) Hernando	815 Lakeland Centres Florida	Quad County Treatment Center Ocala	The Center for Drug Free Living 379 /Orlando (Aspire Health Partners)	Orlando Methadone Treatment Center					
	1,340	361	1,004	144		815		379						4,043
Region B Northeast	Jacksonville Metro Treatment Center	Meridian Behavioral Healthcare, Inc Gainesville	Metro Treatment of Florida, LP Daytona	Meridian Behavioral 629  Healthcare Lake City	Parkside Clinic, LLC	River Region Human 370 Services, Inc. JAX	River Region Human Services, Inc. Orange Park	St Augustine Metro Treatment Center						
	316	238	884	629	57	370 2								2,494
Region A Northwest	Lakeview Center, Inc. Pensacola	Lakeview Center Inc. Shalimar	Metro Treatment of Florida, LP Pensacola	Bay County Treatment Center of Panana City	Lakeview Center Inc. Century Clinic	Leon Metro Treatment of Florida, LP								

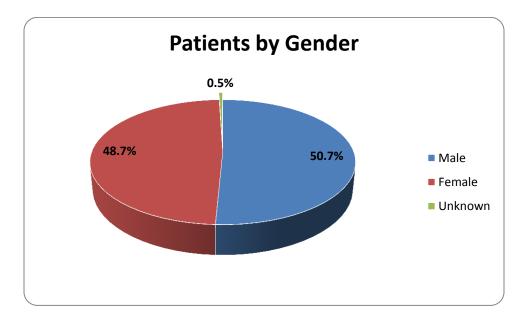
Table 6. Clinic and Patient Numbers per Region

Many patients are located in the Suncoast Region E, with 6,454 patients. Second is the Northeast region with 4,034 patients. Together these two regions represent 56.2 percent of all patients. The fewest number of patients are found in the Southern region. Of the clinics, Table 7 provides the top five according to patient number. Together, the five clinics mentioned comprise 29.3 percent (almost 30 percent) of the patient count.

Rank	Methadone Treatment Clinics	Number of Patients
1	Jacksonville Metro Treatment Center	1,340
2	Bay Area Treatment Center Pinellas Park	1,128
3	Operation PAR Medication Assisted Patient Services Ft Myers	1,007
4	Metro Treatment of Florida, LP Daytona	1,004
5	Orlando Methadone Treatment Center	998

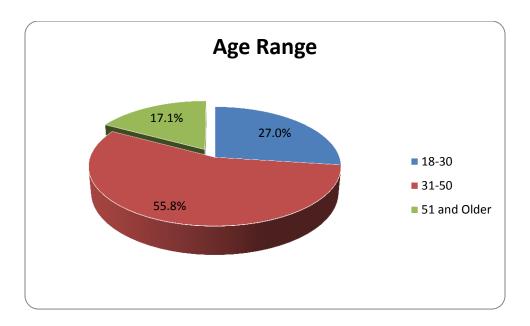
### Table 7: Top-5 Clinics by Patient Number

Figure 3 shows the breakout of patients by gender. There is not a significant difference between the sexes.



### Figure 3: Relative Percentage of Patients by Gender

Figure 4 gives the breakout of patients by age category. The category of 51 years of age and greater represents a smaller percentage of methadone patients. Patients younger than 51 years of age represent 83 percent of the methadone treatment population.



### Figure 4: Relative Number of Patients by Age Category

Figure 5 gives the patients broken out by race category. The overwhelming majority of patients are whites (92 percent). African Americans are next with only 2.2 percent of the patient total.

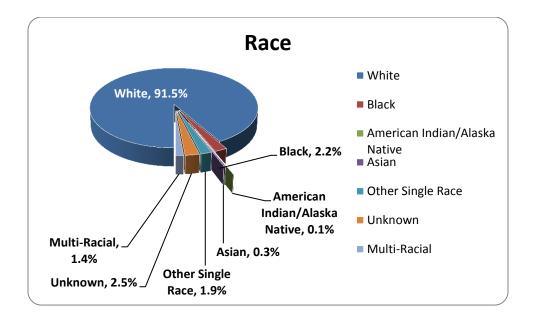
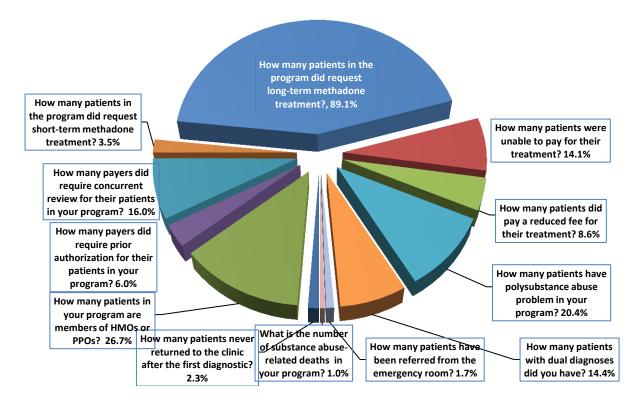




Figure 6 provides a partial overview of the survey questions. The patients' requests for long-term methadone treatment has a high frequency of 89.1 percent, compared with requests for short-term methadone treatment at 3.5 percent. The frequency of patients in HMOs or PPOs is also somewhat high, at 26.7 percent. Concerning additional characteristics of Methadone patients, about 14.4 percent are dual diagnosed and 20.4 percent are diagnosed with polysubstance abuse.

### Figure 6: Average Annual Relative Response Frequencies to Questions Related to Variables



Regional differences can be observed in Table 8 (and Appendix B). The Summary column is the average over the regions and years. The color coding is applied to indicate high (reddish) and low (greenish shading) frequencies. The individual region annual averages are provided in columns A through F, likewise with color shading to indicate high (reddish) and low (bluish shading) frequencies.

		Regions					
Questions Related to Variables	Summary	NWR	NER	CR	SER	SCR	SR
How many patients never returned to the clinic after the first diagnostic?	2.3%	1.7%	0.4%	3.4%	3.2%	1.3%	3.1%
What is the average time prospective patients had to wait to enter the methadone treatment?	1.68	3.67	1.75	2.92	2.06	1.00	
How many patients in your program are members of HMOs or PPOs?	26.7%			44.0%	38.3%	11.2%	12.8%
How many payers did require prior authorization for their patients in your program?	6.0%	13.9%		7.8%	6.1%	4.1%	
How many payers did require concurrent review for their patients in your program?	16.0%		41.6%	3.9%	2.7%	1.8%	
How many patients in the program did request short-term methadone treatment?	3.5%	0.9%	5.5%	4.9%	4.7%	1.4%	1.6%
How many patients in the program did request long- term methadone treatment?	89.1%	103.7%	95.9%	96.9%	89.2%	28.5%	98.4%
How many patients were unable to pay for their treatment?	14.1%	7.6%	2.7%	23.5%	20.9%	19.8%	7.3%
How many patients did pay a reduced fee for their treatment?	8.6%					10.3%	4.2%
Please rate your staff caseload on a five-point Likert scales (1-5), with 1 being the minimum and 5 the maximum.	2.39	4.30	1.78	3.51	3.25	1.17	1.00
How many patients have polysubstance abuse problem in your program?	20.4%	45.0%	36.7%	15.9%	11.0%	7.3%	30.4%
How many patients with dual diagnoses did you have?	14.4%	11.5%	30.8%	16.0%	9.8%	3.9%	
How many patients have been referred from the emergency room?	1.7%	1.1%	0.2%	2.3%	2.5%	2.8%	0.5%
What is the number of subbstance abuse-related deaths in your program?	1.0%	0.8%	0.2%	1.1%	1.4%	0.4%	0.4%

### Table 8: Annual Average Frequencies on Research Questions, Master and Breakouts by Regions

The Table shows that the long term treatment request is pertinent in all regions, with the exception of region E. HMO and PPO member patients are frequent in regions C and D, while polysubstance abuse patients are frequent in region A, B and F. Next is the singular high frequency on payers reviewed in region B, as well as patients with dual diagnosis, also in region B. Last, are the high frequencies of patients unable to pay for their treatment in both regions C and D.

### Quantitative Analysis for Needs Assessment (The GEE Method) The Endogeneous, or Dependent Variables

There is ample evidence that accessibility is a multidimensional concept, that is, the organization of methadone treatment program has a role in inhibiting or facilitating the timely entry of potential patients in a methadone treatment program (McCaughrin and Howard, 1996). Since the mid-90's, the waiting time for patients has become a function of both whether prospective patients can enter the queue and how fast they exit the queue and enter in a methadone treatment program. This research will assess both whether a methadone treatment program turned potential patients away from the treatment, and the amount of wait time before the candidate enters the methadone treatment program (Kaplan and Johri 2000).

After the data collection of reported percentages of diverted candidates of the program, we will dichotomize this variable into "diverted treatment applicants" versus "non-diverted treatment applicants". The CEFA research team also collected the average number of days prospective patients have to wait to enter a methadone treatment program. The team also dichotomized this variable into 48 hours or less, which is representative of a proposed goal for "treatment on demand" in several American cities (San Francisco Board of Supervisors 1996; Drug Strategies 2000).

Both these dependent variables represent the provided "Treatment on Demand," needs of treatment in terms of the applicants' waiting time before treatment entry, and the "patients turned away", which measure the accessibility of methadone treatment, in terms of whether a treatment program turned prospective patients away from the methadone program.

### The Explanatory, or Independent Variables

**The Study Year** was dummy-coded to examine whether organization-level accessibility of treatment changed from years 2010 to 2015; 2010 was the reference, or baseline year. **Program Ownership** was provided in terms of percentages of private or public ownership.

**Managed Care Involvement** was measured through program directors surveyed on the percentage of patients in their programs who were members of health maintenance organizations (HMOs) or preferred provider organizations (PPOs), the percentage whose payer required prior authorization, and the percentage whose payer required concurrent review.

**Methadone Provision** was generated from clinical directors surveyed on methadone practices. Program directors first reported whether their program provided methadone treatment.

**Delivery of Indigent Care** was examined through program directors surveyed on the percentage of patients uninsured and unable to pay for their treatment, the percentage who paid a reduced fee for their treatment, and the percentage of patients with public coverage (Medicaid or Medicare).

**Other Program Characteristics** included program age, measured in years; program size, measured as number of patients (given in percentage) and perception of staff caseload, which the clinical director rated from five-point Likert scales (1-5), with 1 being the minimum and 5 the maximum. Some of these data were collected from the survey conducted by the research team.

**Patient Characteristics** included demographic features such as the percentage of patients' race and ethnicity, gender, and average patients' age. The team also controlled for the percentage of patients with polysubstance abuse, the percentage of patients referred from the criminal justice system and the emergency room, the percentage of substance abuse-related death, the percentage of patients with dual diagnoses, and the percentage of patients with alcohol. These data were gathered from the FDLE, the EDR, and from the survey.

### Survey and Sampling Design

The questionnaire consisted of 14 questions related to methadone treatment programs and their patients. The CEFA team sent the survey via e-mail on June 9, 2015, to 18 directors of methadone treatment program. The results of the survey and the data collected from the study data sources were then further analyzed and interpreted. As mentioned earlier, the initial sample included 18 programs; and all programs have responded to the survey questions<sup>6</sup>. The response rate (based on the survey distribution) for the survey was 100 percent, and highly representative of the program population size in Florida.

<sup>&</sup>lt;sup>6</sup> In addition to the 18 programs, we received 14 additional surveys for a total of 32 surveys (or 71 percent) of all methadone treatment programs in Florida.

### **Statistical Analysis**

The descriptive analyses used standard methods to compare the variables under investigation over at least three years of data. Univariate statistics were weighted to account for the probability of selection (Adams and Heeringa 2000). Generalized estimating equation (GEE) models simultaneously assessed the independent relationship of each of the explanatory variables with both dependent variables, while controlling for potential confounding relationships. The GEE is a method of analyzing correlated, longitudinal data in which subjects are measured at different points in time (Liang and Zeger 1986). This approach summarized overall changes and allowed assessment of differential change across the organization. The research team used Stata 12.0 to generate the GEE model results; including correlation coefficients and robust standard error estimates (Stata Corp. 2012). In this study, both in terms of data from the survey results and those collected among other data sources, the CEFA research team contended with missing data. The reasons for missing data were varied, but with regard to the surveys, were primarily due to difficulties the methadone clinic staff encountered relating to obtaining the data from the historical data files. The highest yield in terms of survey response data was for years 2013 and 2014, with at least 2/3 of the clinics responding with data for these years. The missing data was addressed in the model, using a "missing completely at random" (MCAR) methodology.

### **Needs Assessment Modeling Results**

Using the GEE model to analyze the data on methadone treatment programs and those of their patients, the analysis results revealed that average wait time for patients is less than one day, hence the likelihood is greater that the patients will not be "turned away" from a treatment program.

The analysis noted several trends in the characteristics of methadone treatment programs from 2010 to 2015. The "treatment on demand" program has increased significantly throughout the period of the study, an increase of 84 percent from 2010 to 2015. However, the percentage of programs that are unavailable to patients remained stable from 2010 to 2012, with an increase in 2013, and an expected increase for 2015 (an expected increase of 10 percent occurred 2014 to 2015). The study shows that "Treatment on demand" and "turning away patients" were significantly correlated with the years of the study. The program ownership for the treatment programs were more public, in terms of funding sources. It should be noted that public funding has decreased from 2010 to 2015 and that private funding has "filled that gap" by correspondingly increase funding for those years. Public funding has decreased 3.03 percent between 2010 and 2015, and private funding has increased. These changes are explained by the increase in private programs and by the high

number of private programs selected randomly in the 18 programs' sample of the survey. The program size, in terms of average number of patients in the program, has remained stable over the study period. The program staff labor force is being overutilized with an average score of staff caseloads greater than 3 from year 2013 to current. Regarding the patients' characteristics, the proportion of patients ranging from 12 to 17 years old, remains stable at 9.22 percent. The patients ranging from 18 to 25 years old have the highest proportion and that proportion's interval is 19.11 percent to 21.37 percent; the peak is shown in 2013 while it decreased in 2014. The patients with dual diagnosis were continually increasing over the study period. Also, patients who had problems with alcohol increased from 2012 to current. Those patients referred by the criminal justice system, remained stable. The management care involvement represented by the proportion of patients who were members of an HMO or PPO, showed a decline from 2010 to 2011, and remained stable from 2011 to 2013, with an increase thereafter. The management care involvement has shown an increase over the study period in the proportion of patients whose payer required prior authorization. The same can be said of those patients whose payer required concurrent review. Regarding the methadone treatment, the percentage of methadone programs has remained unchanged over the study period. The methadone treatment programs provide essentially a longer-term treatment. The delivery of indigent care decreased over time. The percentage of patients who were unable to pay for their treatment declined from 2010 to 2015 (a decline of 5 percent), and the uninsured patients also declined from 20.93 percent in 2010 to 19.64 percent, in 2015. The percentage of patients with public insurance coverage increased from 2010 to 2015, but the peak was shown in 2011 (38.21%), while the proportion of patients with private coverage remain stable. To explain the estimated values of the "treatment on demand" and the "turned patients away", the research team found that private ownership is more significant than public ownership.

### **Results for Treatment on Demand**

The results are shown in Appendix C. For the variables of management care involvement, the patients in programs who were members of HMO or PPO explain more than any of the other variables. In the methadone provision, the long-term methadone treatment is more significant than the "treatment on demand". Regarding the delivery of indigent care, the variable "patients with private coverage" is the most significant. For the other characteristics of the programs, the program size is the most significant. In terms of age, the programs which have a greater number of patients aged from 18 to 25 years old are more likely to provide "treatment on demand"; as well as those programs which have a high proportion of white patients. The programs with female patients with polysubstance abuse", those with "dual diagnosis", and those "referred from the criminal justice system" were the

variables that were the most significant in terms of explaining the value of the "treatment on demand".

### **Results for Patients Turned Away**

The results for "patients turned away" are also presented in Appendix C. Similar to "treatment on demand", whether the patients in the program were members of an HMO or PPO was significant in explaining "patients turned away". The short-term treatment programs are more likely to remove patients from the treatment program. Also patients who were uninsured explain significantly the "patients turned away" of the program. In addition, the staff caseload explain significantly explained the "patients turned away", and also patients aged 26 years or greater, and African American patients.

### **Needs Assessment Results and Conclusions**

In summary, the overall availability of outpatient substance abuse "treatment on demand" increased in 2015, for the average increase in the population, which is around 3.7% per year and across regions. In translating the demand for treatment population the research team found that the greatest demand (Table 9) was found in the SunCoast (or Region E) with close to 239, followed by the Region B Northeast (150) and the Region C Central (129). The regions represent the areas of greatest need for additional methadone treatment clinics. The treatment program survey confirmed this trend.

Methadone Clinic Regions	Methadone Ranking
Region A Northwest	4
Region B Northeast	2
Region C Central	3
Region D Southeast	5
Region E SunCoast	1
Region F Southern	6

### **Table 9: Methadone Treatment Program Demand Ranking Among Regions**

It should be noted that that methadone treatment accessibility remains an important concern also in the other regions of: Region A Northwest (92) and Region D Southeast (73). The CEFA research team found that in order to meet the excess demand for methadone treatment programs, it would be beneficial to include two more clinics in the SunCoast, one additional clinic in the Northeast, and one additional clinic in the Central regions (Table 10).

### Table 10: Methadone Treatment Program Demand and Estimated Need for Clinics

Methadone Clinic Regions	Need for Clinics
Region A Northwest	0
Region B Northeast	1
Region C Central	1
Region D Southeast	0
Region E SunCoast	2
Region F Southern	0

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### Appendix A. Survey Instrument for Methadone Treatment Program Clinics

Currents d Veriables	Ourstiene Deleted to Veriables		Respo	onses per Y	'ears	
Suggested Variables	Questions Related to Variables	2010	2011	2012	2013	2014
Applicants the program turned away	How many patients do not return to the clinic after the first diagnostic?					
Average number of days prospective patients had to wait to enter treatment	What is the average time the prospective patients had to wait to enter the methadone treatment?					
Patients in programs (members of HMOs or PPOs)	How many patients in the program are members of HMOs or PPOs?					
Patients whose payer required prior authorization	How many patients that are payers are required prior authorization to the program?					
Patients whose payer required concurrent review	How many patients that are payers required concurrent review in the program?					
Short-term methadone	How many patients in the program request short-term methadone treatment?					
Long-term methadone	How many patients in the program request long-term methadone treatment?					
Patients who were unable to pay for their treatment	How many patients were unable to pay for their treatment?					
Patients who paid a reduced fee for their treatment	How many patients paid a reduced fee for their treatment?					
Perception of staff caseload (rating)	What is the perception of the staff caseload in the program in term of five-point Likert scales?					
Patients with polysubstance abuse	How many patients have polysubstance abuse problem in the program?					
Patients with dual diagnoses	How many patients have dual diagnoses?					
Patients referred from the Emergency Room	How many patients have been referred from the emergency room?					
Substance Abuse-Related Death	What is the number of substance abuse-related death who were patients in the program?					

Appendix B. Summary of Survey Responses, by Region, Years 2010 - 2015

				Responses	nses		
Suggested Variables	Questions Related to Variables	2010	2011	2012	2013	2014	2015
Applicants the program turned away	How many patients never returned to the clinic after the first diagnosic?	2.28%	2.28%	2.48%	2.34%	1.64%	2.87%
Average number of days prospective patients had to wait to enter treatment	What is the average time prospective patients had to wait to enter the methadone treatment?	1.83	1.83	2.00	2.96	2.03	2.67
Patients in programs (members of HMOs or PPOs)	How many patients in your program are members of HMOS or PPOS?	20.20%	27.69%	27.76%	23.82%	22.82%	38.99%
Patients whose payer required prior authorization	How many payers did require prior authorization for their patients in your program?	3.83%	5.56%	7.04%	9.40%	5.09%	5.11%
Patients whose payer required concurrent review	How many payers did require concurrent review for their patients in your program?	23.77%	24.22%	17.23%	20.14%	8.80%	3.18%
Short-term methadone	How many patients in the program did request short-term methadone treatment?	2.09%	3.49%	4.40%	3.57%	4.71%	2.60%
Long-term methadone	How many patients in the program did request long-term methadone treatment?	100.84%	98.96%	97.41%	95.02%	88.40%	57.75%
Patients who were unable to pay for their treatment	How many patients were unable to pay for their treatment?	15.54%	13.04%	14.05%	12.25%	19.27%	10.65%
Patients who paid a reduced fee for their treatment	How many patients did pay a reduced fee for their treatment?	8.97%	5.58%	6.59%	5.11%	7.44%	18.68%
Perception of staff caseload (rating)	Please rate your staff caseload on a five-point Likert scales (1-5), with 1 being the minimum and 5 the maximum.	1.35	1.60	1.87	2.42	3.92	3.17
Patients with polysubstance abuse	How many patients have polysubstance abuse problem in your program?	16.90%	17.55%	16.92%	25.81%	26.57%	18.86%
Patients with dual diagnoses	How many patients with dual diagnoses did you have?	11.37%	12.51%	13.98%	13.63%	16.44%	18.66%
Patients referred from the Emergency Room	How many patients have been referred from the emergency room?	1.70%	1.68%	2.35%	1.67%	1.12%	1.86%
Substance Abuse-Related Death	What is the number of subbstance abuse-related deaths in your program?	0.95%	1.99%	0.73%	1.22%	0.74%	0.44%

### Appendix 1: RFS Summary, Master Responses, Years 2010 through 2015

# Appendix 2: RFS Summary, Master Responses, Averages Years 2010 through 2015

					Responses	\$		
Suggested Variables	Questions Related to Variables	Master	А	B	ပ ပ	D		u.
Applicants the program turned away	How many patients never returned to the clinic after the first diagnosic?	2.3%	1.7%	0.4%	3.4%	3.2%	1.3%	3.1%
Average number of days prospective patients had to wait to enter treatment	What is the average time prospective patients had to wait to enter the methadone treatment?	1.68	3.67	1.75	2.92	2.06	1.00	
Patients in programs (members of HMOs or PPOs)	How many patients in your program are members of HMOs or PPOs?	26.7%		4	44.0%	38.3%	11.2%	12.8%
Patients whose payer required prior authorization	How many payers did require prior authorization for their patients in your program?	6.0%	13.9%		7.8%	6.1%	4.1%	
Patients whose payer required concurrent review	How many payers did require concurrent review for their patients in your program?	16.0%		41.6%	3.9%	2.7%	1.8%	
Short-term methadone	How many patients in the program did request short-term methadone treatment?	3.5%	0.9%	5.5%	4.9%	4.7%	1.4%	1.6%
Long-term methadone	How many patients in the program did request long-term methadone treatment?	89.1%	103.7%	95.9% 9	96.9%	89.2%	28.5%	98.4%
Patients who were unable to pay for their treatment	How many patients were unable to pay for their treatment?	14.1%	7.6%	2.7%	23.5%	20.9%	19.8%	7.3%
Patients who paid a reduced fee for their treatment	How many patients did pay a reduced fee for their treatment?	8.6%					10.3%	4.2%
Perception of staff caseload (rating)	Please rate your staff caseload on a five-point Likert scales (1-5), with 1 being the minimum and 5 the maximum.	2.39	4.30	1.78	3.51	3.25	1.17	1.00
Patients with polysubstance abuse	How many patients have polysubstance abuse problem in your program?	20.4%	45.0%	36.7%	15.9%	11.0%	7.3%	30.4%
Patients with dual diagnoses	How many patients with dual diagnoses did you have?	14.4%	11.5%	30.8%	16.0%	9.8%	3.9%	
Patients referred from the Emergency Room	How many patients have been referred from the emergency room?	1.7%	1.1%	0.2%	2.3%	2.5%	2.8%	0.5%
Substance Abuse-Related Death	What is the number of subbstance abuse-related deaths in your program?	1.0%	0.8%	0.2%	1.1%	1.4%	0.4%	0.4%

				Responses	Si		
Suggested Variables	Questions Related to Variables	2010	2011	2012 2	2013	2014	2015
Applicants the program turned away	How many patients never returned to the clinic after the first diagnosic?				2.12%	1.36%	
Average number of days prospective patients had to wait to enter treatment	What is the average time prospective patients had to wait to enter the methadone treatment?				5.33	2.00	
Patients in programs (members of HIMOs or PPOs)	How many patients in your program are members of HMOs or PPOs?						
Patients whose payer required prior authorization	How many payers did require prior authorization for their patients in your program?				13.89%		
Patients whose payer required concurrent review	How many payers did require concurrent review for their patients in your program?						
Short-term methadone	How many patients in the program did request short-term methadone treatment?				1.32%	0.54%	
Long-term methadone	How many patients in the program did request long-term methadone treatment?			0.	99.33% 1	108.10%	
Patients who were unable to pay for their treatment	How many patients were unable to pay for their treatment?				7.58%		
Patients who paid a reduced fee for their treatment	How many patients did pay a reduced fee for their treatment?						
Perception of staff caseload (rating)	Please rate your staff caseload on a five-point Likert scales (1-5), with 1 being the minimum and 5 the maximum.				4.00	4.60	
Patients with polysubstance abuse	How many patients have polysubstance abuse problem in your program?			~	82.75%	15.00%	
Patients with dual diagnoses	How many patients with dual diagnoses did you have?				11.01%	12.00%	
Patients referred from the Emergency Room	How many patients have been referred from the emergency room?				0.75%	1.36%	
Substance Abuse-Related Death	What is the number of subbstance abuse-related deaths in your program?					0.82%	

# Appendix 3a: RFS Summary, Region A Responses, Years 2010 through 2015

# Appendix 3b: RFS Summary, Region B Responses, Years 2010 through 2015

				Responses	nses		
Suggested Variables	Questions Related to Variables	2010	2011	2012	2013	2014	2015
Applicants the program turned away	How many patients never returned to the clinic after the first diagnosic?	0.21%	0.00%	0.71%	0.27%	0.76%	0.28%
Average number of days prospective patients had to wait to enter treatment	What is the average time prospective patients had to wait to enter the methadone treatment?	1.50	1.50	2.00	1.50	1.00	3.00
Patients in programs (members of HMOs or PPOs)	How many patients in your program are members of HMOS or PPOS?						
Patients whose payer required prior authorization	How many payers did require prior authorization for their patients in your program?						
Patients whose payer required concurrent review	How many payers did require concurrent review for their patients in your program?	50.00%	50.00%	33.33%	42.14%	33.40%	
Short-term methadone	How many patients in the program did request short-term methadone treatment?				2.68%	8.49%	
Long-term methadone	How many patients in the program did request long-term methadone treatment?	100.00%	100.00%	100.00%	89.46%	86.67%	100.00%
Patients who were unable to pay for their treatment	How many patients were unable to pay for their treatment?	1.26%	0.76%	0.77%	3.71%	9.03%	0.83%
Patients who paid a reduced fee for their treatment	How many patients did pay a reduced fee for their treatment?						
Perception of staff caseload (rating)	Please rate your staff caseload on a five-point Likert scales (1-5), with 1 being the minimum and 5 the maximum.	1.00	1.00	1.33	2.00	3.33	2.00
Patients with polysubstance abuse	How many patients have polysubstance abuse problem in your program?	43.75%	43.75%	37.50%	33.55%	37.69%	25.00%
Patients with dual diagnoses	How many patients with dual diagnoses did you have?	27.50%	30.00%	33.33%	30.52%	24.10%	40.00%
Patients referred from the Emergency Room	How many patients have been referred from the emergency room?	0.42%			0.10%	0.09%	0.28%
Substance Abuse-Related Death	What is the number of subbstance abuse-related deaths in your program?	0.42%		0.18%		0.13%	0.28%

Suggested VariablesQuestions Related to VariablesApplicants the program turned awayLow many patients never returned to the clinic after the first diagnosic?Average number of days prospective patients had to wait to enter the average time prospective patients had to wait to enter the mPatients in programs (members of HMOs or PPOs)How many patients in your program are members of HMOs or PPOs?Patients in programs (members of HMOs or PPOs)How many patients in your program are members of HMOs or PPOs?Patients whose payer required prior authorizationHow many patients in your program are members of HMOs or PPOs?Short-term methadoneHow many payers did require prior authorization for their patients in yourCongreterm methadoneHow many patients in the program did request short-term methadone treeDongreterm methadoneHow many patients in the program did request short-term methadone treeDongreterm methadoneHow many patients in the program did request short-term methadone treeDongreterm methadoneHow many patients in the program did request short-term methadone treeDongreterm methadoneHow many patients in the program did request short-term methadone treePatients who were unable to pay for their treatment?How many patients were unable to pay for their treatment?Perception of staff caseload (rating)Perception of staff caseload (rating)Perception of staff caseload (rating)Perception of staff caseload on a five-point Likert scales.Perception of staff caseload on a five-point likert scales.How many patients with dual diagnoses did you have?Patients with dual diagnosesHow many patients with du				Responses		
to wait to enter treatment int	Questions Related to Variables	2010	2011	2012 20	2013 2014	2015
to wait to enter treatment int		2.262%	2.421%	2.161% 2.	2.114% 3.215%	% 8.314%
	What is the average time prospective patients had to wait to enter the methadone treatment?	2.00	2.00	2.00	2.50 4.00	5.00
tt tt		46.37%	45.02%	45.03% 44	44.82% 49.73%	% 33.30%
d concurrent review pay for their treatment tee for their treatment tating)	How many payers did require prior authorization for their patients in your program?				8.92%	% 6.62%
pay for their treatment ee for their treatment rating) buse	How many payers did require concurrent review for their patients in your program?				3.02%	% 4.75%
pay for their treatment ee for their treatment rating) buse	How many patients in the program did request short-term methadone treatment?	2.53%	3.75%	4.75% 6	6.50% 8.00%	3.85%
pay for their treatment ee for their treatment rating) buse	How many patients in the program did request long-term methadone treatment?	107.23%	102.69%	98.21% 93	93.94% 92.00%	% 88.00%
ee for their treatment rating) buse		26.89%	24.22%	19.81% 22	22.10% 31.51%	% 16.76%
ating) buse	ny patients did pay a reduced fee for their treatment?					
sbuse	ate your staff caseload on a five-point Likert scales.	2.25	3.00	3.00	3.50 4.67	7 4.67
		12.65%	14.06%	14.40% 16	16.00% 9.00%	% 30.60%
		17.10%	18.46%	19.35% 21	21.00% 6.00%	% 14.57%
Patients referred from the Emergency Room		2.66%	2.68%	3.16% 3	3.35% 1.44%	% 0.46%
Substance Abuse-Related Death What is the number of subbstance abuse-related deaths in your p	What is the number of subbstance abuse-related deaths in your program?	1.26%	1.54%	0.72% 1	1.33% 1.47%	% 0.51%

### Appendix 3c: RFS Summary, Region C Responses, Years 2010 through 2015

# Appendix 3d: RFS Summary, Region D Responses, Years 2010 through 2015

				Responses	nses		
Suggested Variables	Questions Related to Variables	2010	2011	2012	2013	2014	2015
Applicants the program turned away	How many patients never returned to the clinic after the first diagnosic?	3.14%	3.82%	4.33%	4.24%	2.23%	1.21%
Average number of days prospective patients had to wait to enter treatment	What is the average time prospective patients had to wait to enter the methadone treatment?	2.00	2.00	2.00	2.50	2.17	1.67
Patients in programs (members of HIMOs or PPOs)	How many patients in your program are members of HMOs or PPOs?	20.90%	54.23%	52.09%	52.09%	22.68%	32.24%
Patients whose payer required prior authorization	How many payers did require prior authorization for their patients in your program?					5.66%	6.46%
Patients whose payer required concurrent review	How many payers did require concurrent review for their patients in your program?					1.57%	3.83%
Short-term methadone	How many patients in the program did request short-term methadone treatment?	2.00%	5.00%	7.00%	6.00%	4.00%	4.00%
Long-term methadone	How many patients in the program did request long-term methadone treatment $?$	98.00%	95.00%	93.00%	94.00%	95.14%	62.67%
Patients who were unable to pay for their treatment	How many patients were unable to pay for their treatment?	28.15%	21.78%	31.44%	21.92%	10.65%	13.12%
Patients who paid a reduced fee for their treatment	How many patients did pay a reduced fee for their treatment?						
Perception of staff caseload (rating)	Please rate your staff caseload on a five-point Likert scales (1-5), with 1 being the minimum and 5 the maximum.	2.00	2.50	3.50	3.50	4.00	4.00
Patients with polysubstance abuse	How many patients have polysubstance abuse problem in your program?	3.00%	5.00%	6.00%	8.00%	30.72%	15.31%
Patients with dual diagnoses	How many patients with dual diagnoses did you have?	3.00%	4.00%	6.00%	8.00%	17.78%	21.27%
Patients referred from the Emergency Room	How many patients have been referred from the emergency room?	3.49%	2.10%	3.64%	4.51%	0.64%	0.52%
Substance Abuse-Related Death	What is the number of subbstance abuse-related deaths in your program?	1.18%	2.44%	1.30%	1.98%	1.03%	0.52%

				Responses	nses		
Suggested Variables	Questions Related to Variables	2010	2011	2012	2013	2014	2015
Applicants the program turned away	How many patients never returned to the clinic after the first diagnosic?					0.65%	1.89%
Average number of days prospective patients had to wait to enter treatment	What is the average time prospective patients had to wait to enter the methadone treatment?					1.00	1.00
Patients in programs (members of HIMOs or PPOs)	How many patients in your program are members of HMOs or PPOS?	3.83%	5.56%	7.04%	5.09%	0.85%	52.32%
Patients whose payer required prior authorization	How many payers did require prior authorization for their patients in your program?	3.83%	5.56%	7.04%	5.09%	0.85%	2.32%
Patients whose payer required concurrent review	How many payers did require concurrent review for their patients in your program?	2.13%	2.88%	3.07%	1.54%	0.37%	0.98%
Short-term methadone	How many patients in the program did request short-term methadone treatment?					2.75%	0.00%
Long-term methadone	How many patients in the program did request long-term methadone treatment?					63.10%	1.26%
Patients who were unable to pay for their treatment	How many patients were unable to pay for their treatment?					27.53%	12.58%
Patients who paid a reduced fee for their treatment	How many patients did pay a reduced fee for their treatment?	14.88%	7.67%	8.48%	5.24%	7.44%	18.68%
Perception of staff caseload (rating)	Please rate your staff caseload on a five-point Likert scales (1-5), with 1 being the minimum and 5 the maximum.	0.50	0.50	0.50	0.50	3.00	2.00
Patients with polysubstance abuse	How many patients have polysubstance abuse problem in your program?	0.07%	0.07%	0.06%	0.05%	43.96%	6.02%
Patients with dual diagnoses	How many patients with dual diagnoses did you have?	0.05%	0.05%	0.05%	0.04%	23.35%	1.92%
Patients referred from the Emergency Room	How many patients have been referred from the emergency room?				0.10%	2.09%	6.29%
Substance Abuse-Related Death	What is the number of subbstance abuse-related deaths in your program?					0.26%	0.44%

# Appendix 3e: RFS Summary, Region E Responses, Years 2010 through 2015

# Appendix 3f: RFS Summary, Region F Responses, Years 2010 through 2015

				Responses	inses		
Suggested Variables	Questions Related to Variables	2010	2011	2012	2013	2014	2015
Applicants the program turned away	How many patients never returned to the clinic after the first diagnosic?	3.54%	2.92%	2.76%	3.01%		
Average number of days prospective patients had to wait to enter treatment	What is the average time prospective patients had to wait to enter the methadone treatment?						
Patients in programs (members of HMOs or PPOs)	How many patients in your program are members of HMOS or PPOS?	13.62%	12.62%	12.84%	12.13%		
Patients whose payer required prior authorization	How many payers did require prior authorization for their patients in your program?						
Patients whose payer required concurrent review	How many payers did require concurrent review for their patients in your program?						
Short-term methadone	How many patients in the program did request short-term methadone treatment?	1.73%	1.76%	1.52%	1.45%		
Long-term methadone	How many patients in the program did request long- term methadone treatment ?	98.27%	98.24%	98.48%	98.55%		
Patients who were unable to pay for their treatment	How many patients were unable to pay for their treatment?	8.22%	7.13%	6.63%	7.27%		
Patients who paid a reduced fee for their treatment	How many patients did pay a reduced fee for their treatment?	3.37%	3.53%	4.74%	4.97%		
Perception of staff caseload (rating)	Please rate your staff caseload on a five-point Likert scales (1-5), with 1 being the minimum and 5 the maximum.	1.00	1.00	1.00	1.00		
Patients with polysubstance abuse	How many patients have polysubstance abuse problem in your program?	30.81%	30.26%	30.93%	29.60%		
Patients with dual diagnoses	How many patients with dual diagnoses did you have?						
Patients referred from the Emergency Room	How many patients have been referred from the emergency room?	0.28%	0.28%	0.29%	1.30%		
Substance Abuse-Related Death	What is the number of subbstance abuse-related deaths in your program?				0.35%		

### Appendix C. Results of the GEE Analysis (Treatment on Demand and Patients Turned Away)

	Conf.																																
	[95%	0.0030313	0.0030591	0741832	0.5691631	0.0806138	0.8959422	0.0119591	0.0643138	.1544711	0.2709339	0.0060125	0007001	0014926	0.0047913	0.0291386	0256535	.275234	0718638	0318736	0.0168177	0405177	0.1657428	0.0060371	0.1157121	0.1575257	0.3730923	0792392	0.0095349	-0.8102369	0.8783545		0007795
	P> z	-0.015304 -0.0030313	-0.0146351-0.0030593	-0.025038:0.0741832	-0.7473181-0.5691631	-0.102011 -0.0806138	-1.178197 -0.8959422	0 -0.0419891-0.0119592	-0.08834010.0643138	0 0.0772551 0.1544711	-0.08806340.2709339	-0.00244110.0060125	-0.000055(0.000700)	-0.00085410.0014926	-0.005056 0.0047913	-0.013957 0	0.0172001 0.0256535	0.2225386 5.275234	-0.25709340.0718638	-0.048750.0.0318736	0.003609 0.0168177	0.00055270.0405177	-2.538702 -0.1657428	-2.446915 -0.0060371	-2.348654 -0.115712	0 0.0988014 0.1575257	0 -0.438813:-0.3730923	-0.0675380.0792392	-0.019896 -0.0095349	0 -1.401571 -	-1.661297 0		-0.00232010.0007795
	z	0.003	0.003	0.332	0	0	0	0	0.758	0	0.318	0.408	0.095	0.594	0.958	0.49	0	0.033	0.27	0.682	0.002	0.044	0.025		0.031	0	Ō	0.876	0	0	0.546		0.33
	Err.		μ		-14.48	-16.73	-14.4	-3.52	-0.31	5.88	1							2.13	-1.1	L						8.56	-24.21		-5.57	-7.33			
	Std.	0.0031309	0.0029531	0.0253121	0.0454487	0.0054586	0.0720051 - 14.4	0.0076609	0.038943	0.0196983	0.0915826	0.0021566	0.0001928	0.0005987	0.0025123	0.010994	0.0021565	1.288977		0.0205677	0.0033696	0.0101953	0.6053579	0.6226844	0.5696384	0.014981	0.0167658	0.0374441	0.0026434	0.1508533	0.6478822 -0.6		0.0007909
	Coef.	-0.009167(0.0031309 -2.93	-0.008847:0.0029531	0.02457230.02531210.97	-0.65824000.0454487 -14.48	-0.09131240.0054586 -16.73	-1.03707	-0.026974 0.0076609 -3.52	-0.01201310.038943	0.11586310.0196983 5.88	0.0914353 0.0915826	0.00178560.00215660.83	0.0003223 0.0001928 1.67	0.00031920.00059870.53	-0.000132(0.0025123 -0.05	0.0075908 0.010994	$\sim$	2.748887	-0.092614(0.0839192	-0.008438:0.0205677	0.0102134 0.0033696 3.03	0.02053520.01019532.01	-1.352223 0.6053579 -2.23	-1.226476 0.6226844 -1.97	-1.232183 0.5696384 -2.16	0.1281635 0.014981 8.56	-0.405952 0.0167658 -24.21	0.0058502 0.0374441 0.16	-0.01471540.0026434 -5.57	-1.105904	-0.3914714	(omitted)	-0.000770(0.0007909 -0.97
	АРТА	PuOW	PrOW	PIP	PPRA	PPRCR	STM	LTM	NMP	PUPT	PPRFT	PU	PMC	РРС	PRA		PSC	Σ	F	AgeA	AgeB	AgeC	×	BAA	НL	PPSA	PDD	PPA	PRCJS	PRER	SARD	substate	visit
9, c +		9474	]																														
Average APTA in term of	Days	0.7829474	]																														
Average APTA in term of	Da		J 	66/	2755	3889		<u>1497</u>	956	546	3596	7686		16	196	117	794	567	27	192	321	164	592	382	294	105	1743		228	785	3931	1358	
Average APTA in term of	Max Da	2	83.16667	72.80799	0.5422755	0.138889	0.5	0.0849497	1.080956	7.900546	0.3150596	0.1867686	31.9	40.0416	54.17196	21.85417	37.43794	4.666667	12.3627	16.44192	10.12321	23.70164	7.718692	16.62382	3.568294	18.717105	0.8274743	0.04	10.03228	25.26785	0.0628931	0.0244358	
Average APTA in term of	Min Max Da	1 5	27.19201 83.16667		0 0.5422755	0	0.05	0 0.0849497	0 1.080956		0 0.3150596	00.1867686	14.8	12.8028 40.0416	36.426 54.17196	5.208333 21.85417	1.416664	0 4.666667	3.645092	3.620849 16.44192	7.72 10.12321	16.2	4.12	2.317073 16.62382	1.364751 3.568294	0.3778141 8.717105	0 0.8274743	0 0.4	5.8	6.226062	0	0	
Average APTA in term of	Min Max Da	1 1 5	6 27.19201 83.16667	17.49166 16.83333 72.80799	11 0	0					0.1087683 0 0.3150596		2 14.8		3 36.426	1 5.208333	.8 1.416664	5 0		1 3.620849	7 7.72		4.12	5.355999 2.317073 16.62382	0.71822	2.749576 0.3778141 8.717105		[29			59 0	66 0	
APTA in term of	Mean Std.Dev Min Max Da	2.222222 1.244671 1 5	17.49166 27.19201 83.16667	17.49166 16.83333	11 0	0					0.1087683		4.446322 14.8	7.91915 12.8028	4.093843 36.426	12.46061 4.854201 5.208333	10.98118 1.416664	1.968056 1.551315 0	3.065056 3.645092	4.216751 3.620849	0.682817 7.72	2.332253 16.2	1.045668 4.12	9.648904 5.355999 2.317073 16.62382	0.71822	3.744248 2.749576 0.3778141 8.717105		[29	1.065104 5.8	5.966625 6.226062	59 0	66 0	
Average APTA in term of	Min Max Da	2.222222 1.244671 1 5	6 27.19201 83.16667		36 0.1734372 0.205911 0 0 0.5422755	0				36 6.422267 0.8137902 4.8 7.900546		36[0.0219457[0.0441232] 0[0.1867686	2 14.8	12.8028	3 36.426	4.854201 5.208333	10.98118 1.416664	1.551315 0	6 3.645092	1 3.620849	7 7.72	3 16.2	4.12	36 9.648904 5.355999 2.317073 16.62382	0.71822	36 3.744248 2.749576 0.3778141 8.717105	978		04 <b>5</b> .8	5 6.226062	0	0	

not

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