

Ohio Department of Mental Health
Division of the Medical Director
Office of Evaluation & Research

Report on Type 1 Residential Providers and the SFY 2008 Out-of-Home Service Population

Introduction

This report on a cohort of youth served by Type 1 Residential Treatment Providers (RTPs) in SF08 was prepared for *Children’s Mental Health: Visioning for the Future*. The analyses uses a panel methodology, whereby a cohort of youth identified in the Statewide Automated Child Welfare Information System (SACWIS) as living in residential settings during SFY08 was examined for service receipt in MACSIS during SFY07 through SFY09.

Description of Cohort

According to the merged records of SACWIS and MACSIS, there were 3,865 youth in out-of-home placements in a residential setting during SFY08 who received mental health services that year. As previously noted, out-of-home placement in a residential setting is determined by data provided from SACWIS, the child welfare reporting system operated by ODJFS. These residential settings may be with residential providers certified by ODJFS and/or residential treatment providers (RTP) licensed by ODMH. Of the 3,865 youth who received mental health services while living in a residential setting, **1,644** received services from a Type 1 Residential Treatment Provider in SFY08. Type 1 RTPs are licensed by ODMH to provide a 24-hour bed as well as treatment.

Of the 1,644 youth in the SFY08 RTP cohort, 913 were placed in an out-of-home setting for 365 days or less when they were treated by a Type 1 RTP. Some 734 were in an out-of-home setting for 366 days or more when treated by a Type 1 RTP.

Table 1. Demographic Profile of Cohort by Number of SFY in Treatment

	SFY08 Cohort	Cohort with 365 days or less out-of-home	Cohort with 366 days or more out-of-home	Category Measure
Total	1,644	734	913	Consumers
Gender	58%	55%	60%	<i>Male</i>
	42%	45%	40%	<i>Female</i>
Race	46%	48%	44%	<i>White</i>
	52%	50%	54%	<i>Af-Am</i>
	2%	2%	2%	<i>Other</i>
Age	12.98	13.54	12.53	<i>Mean</i>
	13.37	14.14	12.87	<i>Median</i>

Table 1 above shows that males outnumber females in the cohort and that their number increases the longer they are in an out-of-home placement. The demographic distribution also shows that African-American youth are disproportionately represented in the out-of-home population who received services from a Type 1 RTP, and that as length of time in an out-of-home setting progresses, their number increases. The average age of youth in the SFY08 cohort is about 13-year-old. Those in out-of-home settings for less than a year tend to be a little older, while those in out-of-home settings more than a year tend to be a little younger. However, the high median age of those in out-of-home settings less than a year suggests the possibility of subpopulation in the shorter term group “aging out” of the system.

Limitations of data: It is possible that a proportion of the youth in the SFY08 Cohort received services from a Type 1 RTP while living in residential setting other than a Type 1 treatment bed at some point in the course of service provision by the Type 1 RTP. Out-of-home lengths of stay do not equal length of stay from admission to discharge from a Type 1 bed.

Lengths of Stay

Table 2 below shows proxy variables for Lengths of Stay (LOS) for the SFY08 Cohort. LOS is measured as 1) days in out-of-home placement (OOH Days), 2) days when treatment was provided (TxDays), and 3) *longevity* or length of time from first to last service date. The data source of the LOS variables, e.g., SACWIS or MACSIS, is noted. Data necessary to compute an LOS based on dates of admission and discharge from a Type 1 RTP bed are not available.

Table 2. Lengths Stay for SFY08 Cohort Groups

	SFY08 Cohort	Cohort with 365 days or less out-of-home	Cohort with 366 days or more out-of-home	Category Measure
Total Served	1,644	734	913	Consumers
OOH Days (SACWIS)	442.8	183.3	651.2	<i>Mean</i>
	405	182	596	<i>Median</i>
Tx Days (MACSIS)	198.8	125.1	257.7	<i>Mean</i>
	147	86.5	229	<i>Median</i>
Longevity (MACSIS)	506.2	389.2	599.9	<i>Mean</i>
	471.5	307.5	584	<i>Median</i>

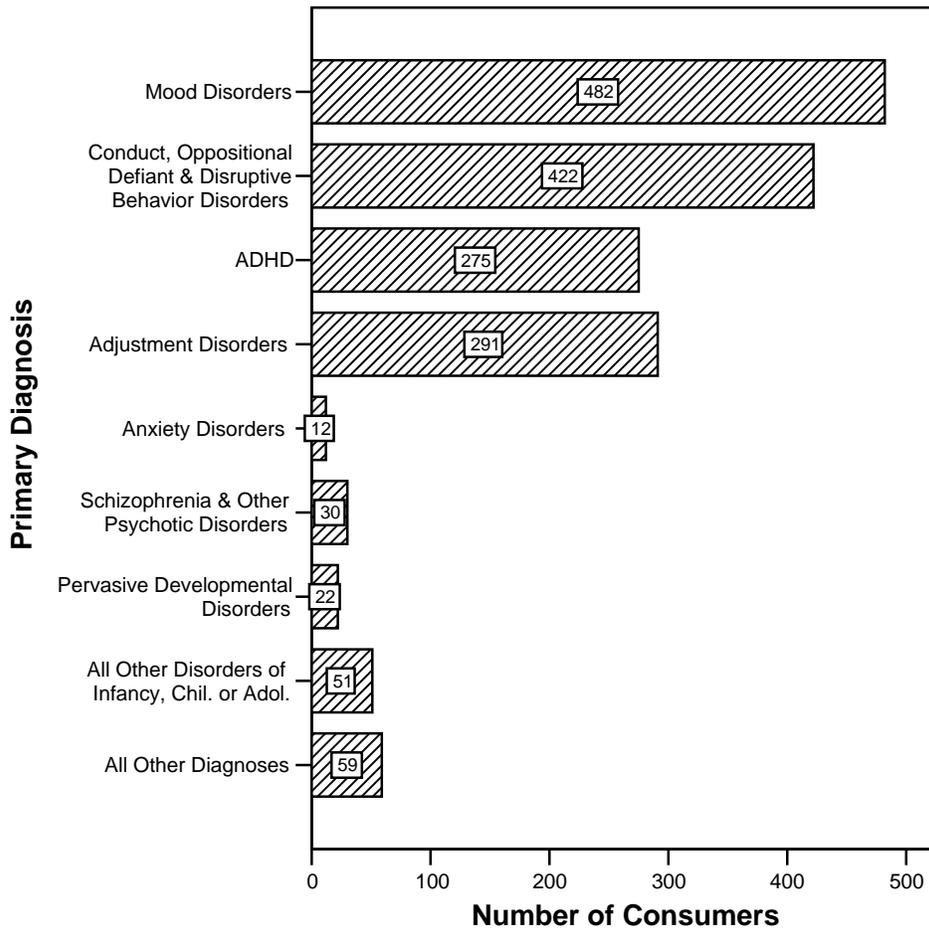
Table 2 above shows that the average length of time cohort members were in contact with a Type 1 RTP was about 60 days longer than the average length of time they were in out-of-home placement. More than half the cohort (N = 913) spent over a year in a residential placement, while slightly less than half (N = 734) spend a year or less in a residential placement. The 734 youth in residential placement less than one year averaged about 6 months in that setting, while the 913 in residential placement more than a year averaged about 1.75 years in that setting.

Limitations of data: The actual number of out-of-home placement days, treatment days, and longevity may extend as far back as SFY02, because the data set is truncated on July 1, 2006. It is not accurate to assume that out-of-home days or longevity equals the length of time spent in a Type1 RTP bed. Consumers served by a Type 1 RTPs may be stepped up from a less intensive residential setting such as an ODJFS-licensed bed to a Type 1 bed or stepped down from a Type 1 bed into a less intensive residential setting. To the extent that SACWIS data are reliable, the days of out-of-home placement in residential setting represents length of time in some type of institutional setting.

Diagnoses

Chart 1 depicts the diagnostic groups for the cohort of 1,644 consumers treated by Type 1 RTP. Primary diagnostic groupings are based on the most frequent diagnosis assigned to claims for the individual consumer.

Chart 1. Distribution of Diagnostic Categories in the SFY08 Cohort



Limitations of data: Diagnostic groups were determined by calculating the most frequent diagnosis appearing in the billing records for each consumer in the cohort. This is a usual and standard data

mining practice for selecting a single diagnosis among several. Without data provided by the Children’s Global Assessment Scale (C-GAS), it is difficult to determine how so many children with adjustment disorders and ADHD would meet criteria for a Type 1 RTP bed.

Board of Residence

Table 3 below shows distribution of cohort members according to their boards of residence. Also indicated are the geographic locations of the 23 Type 1 RTP at 24 Board area locations. About 45% of youth (N = 738) in the cohort received services at a Type 1 RTP located outside their board of residence. Table 3 also reports the number of Type 1 RTPs located in the board’s area.

Table 3. Distribution of SFY08 Cohort by Board of Residence

Board Name	# Consumers	% Cohort	# Type1 RTP
ALLE-AUGL-HARD	2	.3%	
ASHL	2	.3%	
ASHT	7	.9%	
ATHE-HOCK-VINT	3	.4%	
BELM-HARR-MONR	5	.7%	1
BUTL	30	4.1%	1
CHAM-LOGA	1	.1%	
CLAR-GREE-MADI	15	2.0%	1
CLER	47	6.4%	
COLU	10	1.4%	
CUYA	80	10.8%	7
DEFI-FULT-HENR-MONR	5	.7%	
DELA-MORR	10	1.4%	
ERIE-OTTA	11	1.5%	
FAIR	1	.1%	
FRAN	88	11.9%	4
GALL-JACK-MEIG	2	.3%	
GEAU	4	.5%	
HAMI	66	8.9%	3
HANC	2	.3%	
HURO	4	.5%	
JEFF	3	.4%	
LAKE	25	3.4%	
KNOX-LICK	4	.5%	
LORA	22	3.0%	
LUCA	15	2.0%	1
MAHO	37	5.0%	
MARI-CRAW	5	.7%	

Board Name	# Consumers	% Cohort	# Type1 RTP
MEDI	3	.4%	
MIAMI-DARKE-SHELBY	8	1.1%	
MONT	45	6.1%	1
MUSK-AREA	4	.5%	2
PORT	8	1.1%	
PREB	1	.1%	
RICH	1	.1%	
ROSS-FAYE-HIGH-PICK-PIKE	4	.5%	
SCIO-ADAM-LAWR	3	.4%	1
SAND-SENE-WYAN	9	1.2%	
STARK	18	2.4%	
SUMM	113	15.3%	
TRUM	0	0%	1
TUSC-CARR	3	.4%	
UNIO	1	.1%	
MERC-PAUL-VWER	1	.1%	
WARR-CLIN	1	.1%	
WASH	1	.1%	
WAYN-HOLM	5	.7%	
WOOD	3	.4%	1
<i>Totals</i>	738	100%	24

Limitations of data: Type 1 RTPs were identified by cross-matching licensure names and addresses with Unique Provider/Vendor (UPI) numbers associated with provider names and addresses in MACSIS. Twenty-three Type 1 RTPs and UPIs were identified in this manner. One RTP (Pomegranate) appears to use a single UPI for services delivered at its Franklin County and Muskingum County locations. The validity of the out-of-board service receipt analysis is contingent upon correct identification of Type 1 RTPs by UPI and provider location.

Type 1 and Other Providers

A small group of the SFY08 Cohort (212 consumers) was treated *only* by Type 1 RTPs. The majority (1,431 consumers) was treated by a nonType 1 provider before and/or during or/after services were delivered by a Type 1 provider. The number of providers involved with service delivery to the SFY08 Cohort is shown in Table 4 below.

Table 4. Number of Providers by Two Provider Categories:
Only Type 1 and Type 1 & Other

Providers per Consumer	Type 1 Only (N = 212 Consumers)	Type 1 & Other (N = 1,431 Consumers)
<i>Median</i>	1	4
<i>Mode</i>	1	3
<i>Min</i>	1	1
<i>Max</i>	6	12
<i>N Providers</i>	23	312

Although 1,644 consumers received services from a Type 1 RTP, a group of 212 consumers received care *only* from one *or more* Type 1 providers during the study period. The “max” statistic indicates that at least one consumer received care from six (6) different Type 1 RTPs. The majority (N = 1,431) also received services from one or more nonType 1 providers. The “max” statistic shows that at least one consumer received care from 12 different providers (Type 1 and Other) during the study period.

Net Cost of Services

Table 5 below shows the net cost of services for the cohort of youth who received treatment from a Type 1 RTP at some time during SFY08. The net cost figures are based on all services provided between SFY07-09 by all providers (Type 1 RTP and others), for services provided only by Type 1 RTPs, and for services provided by other providers (nonType1).

Table 5. Net Cost of Services by Three Provider Categories: All, Only Type 1, Other

Net Cost of Services	All Providers (Type 1 & Other)	Type 1 RTP	Other Providers (NonType 1)
<i>Mean Net Amnt</i>	\$35,562	\$24,505	\$12,964
<i>Median Net</i>	\$27,907	\$15,796	\$7,967
<i>MinNet</i>	\$64	\$45	\$0
<i>MaxNet</i>	\$142,064	\$135,871	\$86,083
<i>SD</i>	\$28,724.2	\$15,795.7	\$7,966.7

Table 5 above indicates that the average per patient cost of services provided by all providers during the study period was \$35,562. The average per patient cost for Type 1 RTP was \$24,505, while that of Other Providers was \$12,964.

Types of Services: Quantities & Net Amounts

Table 6 below shows the distribution of services by number of consumers, quantity of units (measured in both hours and days), and net amounts provided by Type 1 RTP. Table 7 below shows the distribution of services by numbers of consumers, quantity of units, and net amounts provided by nonType 1 RTP.

Table 6. Distribution of Services by Numbers of consumers, quantities, and net amounts: Type 1 RTP

Service	N Cons	Total Units	Mean Units	SD	Net Amt	Mean Net Amt	SD
Psych Interv*	384	445.4 hrs	1.16 hrs	.67	\$88,241	\$229.8	\$129.3
Diag Assess*	1333	6,037.5 hrs	4.52 hrs	4.2	\$7,650,008	\$573.9	\$534.0
Pharm Mgt*	1290	16,518.8 hrs	12.8 hrs	15.8	\$3,365,448	\$2,608.9	\$3,201.9
Part Hosp*	912	173,267.9 days	89.9 days	172.4	\$19,488,549	\$21,369.0	\$1,9612.7
Counseling*	1454	204,275 hrs	140.5 hrs	607.2	\$11,425,790	\$7,858.2	\$7,272.0
CSPT*	1114	62,030.8 hrs	55.7 hrs	249.7	\$4,884,683	\$4,269.8	\$4,857.9
Crisis Intv*	41	104.40 hrs	5.5 hrs	3.8	\$16,062	\$391.9	\$577.7
Res Tx Fac	2	479 days	239.5 days	33.2	\$85,952	\$42,975.9	\$5,963.5
Respite	12	291 days	24.3 days	14.1	\$27,510	\$2,292.5	\$1,854.8
Soc Rec Svcs	1	2.0 hrs	2.0 hrs	-	\$146	-	\$146.0
Other MH	40	4,316.4 (variable)	107.9 (variable)	148.4	\$139,007	\$3,475.2	\$4,764.1
Totals	1644	n/a	n/a	n/a	\$47,171,396	\$24,505.1	\$15,795.7

*Indicates Medicaid-billable services

Type 1 RTPs billed for delivery of partial hospital to 912 consumers. Among the Medicaid billable services, this category had the highest average cost per patient at \$21,369. Among the nonMedicaid billable services, two patients received subsidized Residential Treatment Facility service at an average cost of \$42,976. (Not all boards provide this nonMedicaid service subsidy.) The most patients (N = 1,454) received counseling services, and the average cost per patient was \$7,858.

Table 7. Distribution of Services by Numbers of Consumers, Quantities, and Net amounts: Other Prov

Service	N Cons	Total Units	Mean Units	SD	Net Amt	Mean Net Amt	SD
Psych Interv*	541	791.9 hrs	1.5 hrs	.96	\$160,561	\$296.8	\$198.1
Diag Assess*	430	6,012.4 hrs	4.9 hrs	5.0	\$733,476	\$604.2	\$3,406.9
Pharm Mgt*	591	7,780.8 hrs	7.4 hrs	10.8	\$1,577,556	\$1,498.2	\$5,236.4
Part Hosp*	356	36,190.4 days	101.7 hrs	101.6	\$4,128,772	\$11,597.7	\$11,556.8
Counseling*	1167	77,045.6 hrs	66.0 hrs	399.3	\$4,848,101	\$4,154.3	\$5,236.4
CSPT*	1109	54,705.1 hrs	49.3 hrs	235.0	\$4,255,941	\$3,837.6	\$4,579.9
Crisis Intv*	395	1,602.5 hrs	4.1 hrs	4.8	\$235,383	\$595.9	\$720.1
ACT – Clinical	1	107.0 days	107.0 days	-	-	-	-
Res Tx Fac	3	262.0 days	87.3 days	92.1	\$4,820	\$1,606.7	\$1,918.6
Crisis Care	1	4.0 days	4.0 hrs	-	-	-	-
Adj Therapy	1	28.8 hrs	28.8 hrs	-	\$2,472	\$2,471.8	-
Soc Rec Svcs	2	3.0 hrs	1.5 hrs	.71	\$213	\$106.5	\$50.2
Prevention	3	3.7 hrs	1.2 hrs	1.3	\$757	\$151.4	\$113.1
Consultation	3	4.2 hrs	1.4 hrs	.44	0	-	0
Other MH	38	5,023.5 (variable)	132.2 (variable)	178.8	\$13,6653	\$3,596.1	\$4,493.7
Cuya Waiver	122	1,308.0	10.7	8.0	\$2,091,112	\$17,149.3	\$1,2883.2
Totals	212	n/a	n/a	n/a	\$18,039,112	\$12,693.4	\$13,765.0

*Indicates Medicaid-billable services

Table 7 shows that just under one-fourth of the cohort (N =356) received partial hospital service from Other Providers (nonType 1), but this category had the highest average cost per patient at \$11,598. Although the Cuyahoga Waiver reflects a service category for just one board, it was the highest average cost per patient (\$17,149) among the nonMedicaid services delivered by nonType 1 Providers. The most consumers (N = 1167) received counseling services, and the average cost per patient was \$4,154.

Implications

Data on lengths of stay, distribution of providers, and service categories suggest that youth receive intensive services while living in congregate care settings other than those of Type 1 RTPs. Are partial hospital or residential treatment facility services delivered to consumers living in JFS-certified residential settings qualitatively different than the partial hospital and residential treatment facility services delivered by Type 1 RTPs? More work should be done on defining what is meant by the concept of “Residential Treatment” and understanding the continuum of care delivered to consumers placed in congregate living arrangements.