

CONTRA COSTA COUNTY ASSISTED OUTPATIENT TREATMENT *CUMULATIVE EVALUATION REPORT FINDINGS*

October 2018

Resource Development Associates

2

Introduction

AOT Timeline

3

February 5,
2015

- Contra Costa Board of Supervisors authorized Assisted Outpatient Treatment.

February 1,
2016

- CCBHS began accepting AOT referrals.
- CCBHS received its first referral and conducted its first investigation.

February 5,
2016

- MHS outreaches to the first eligible individual.

March 4,
2016

- MHS enrolls the first ACT consumer.

June 30,
2018

- Since AOT implementation, CCBHS has received 475 referrals and MHS has enrolled 70 consumers

Research Questions & Evaluation Period

4

Evaluation Period: February 2016 – June 2018

Question 1

- What are the outcomes for people who participate in ACT and AOT, including the DHCS required outcomes? How faithful are ACT services to the ACT model?

Question 2

- What are the differences in demographics, service patterns, and outcomes between those who agree to participate in ACT services voluntarily and those who participate with an AOT court order or voluntary settlement agreement?

Question 3

- What are the differences in demographics, service utilization, and outcomes between those who engage in existing FSP services and those who receive ACT services?

Data and Limitations

5

Data Provided

- CCBHS
 - ▣ Referral and investigation information
 - ▣ Service utilization data for all specialty mental health services provided or paid for by CCBHS
- MHS
 - ▣ Outreach and engagement contacts
 - ▣ Clinical assessments/outcomes
 - ▣ FSP assessments (PAF and KET)
 - ▣ ACT consumer and family focus groups (from previous ACT fidelity assessment)
- Sheriff's Office
 - ▣ Bookings and booking reasons
- Cost Data from CCBHS, County Counsel, MHS, Public Defender's Office, and Superior Court

Limitations

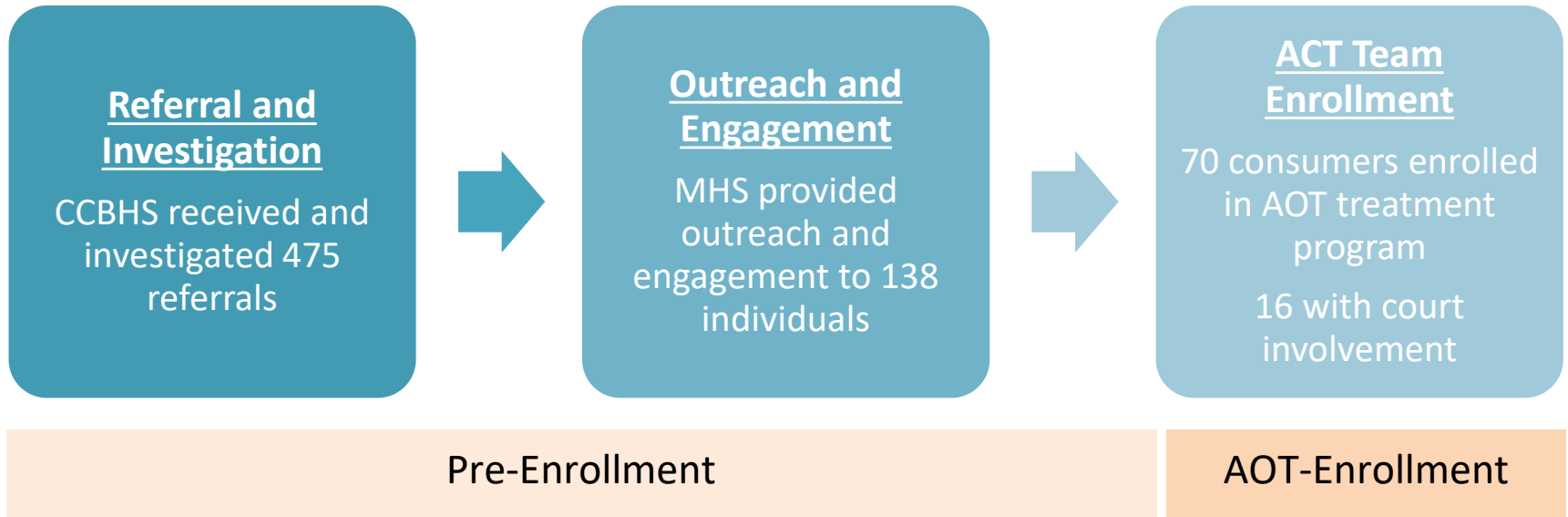
- Only 16 consumers have participated in AOT Treatment with court involvement
 - ▣ RDA aggregated some outcomes to maintain confidentiality
 - ▣ Proportions, averages, and rates shift dramatically based on experiences of relatively few individuals
- Time period prior to enrollment longer than during/after enrollment
 - ▣ RDA standardized outcome measures to rates per 180 days to account for variability in enrollment lengths and available pre- and post-data

Findings: Research Question 1

- What are the outcomes for people who participate in ACT and AOT, including the DHCS required outcomes?
- How faithful are ACT services to the ACT model?

Pre- and AOT-Enrollment

7



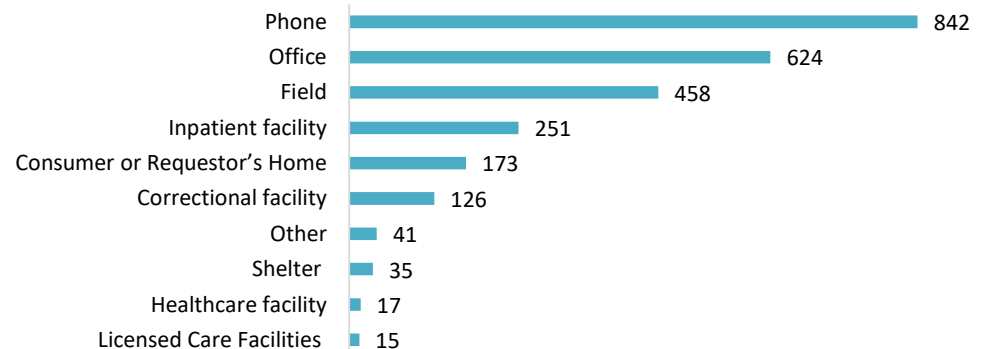
Referrals and Investigations

CCBHS received referrals from a diversity of qualified requestors, including family members, mental health providers, and law enforcement officials.

Requestor	Percent of Total Referrals (N = 475)
Parent, Spouse, Adult Sibling, or Adult Child	60% (n = 286)
Treating or supervising mental health provider	20% (n = 95)
Probation, parole, or peace officer	13% (n = 63)
Not a qualified requestor or "other"	4% (n = 20)
Director of Hospital where individual is hospitalized	<3%
Adult who lives with individual	<3%

Nearly every referred individual who was eligible for AOT and/or was able to be located was connected to mental health services.

Investigation Outcome	Percent of Referrals (N = 475)
Referred to MHS	32% (n = 154)
Engaged or Re-Engaged with a Provider	14% (n = 66)
Ongoing Investigation	17% (n = 81)
Investigated and Closed	37% (n = 174)

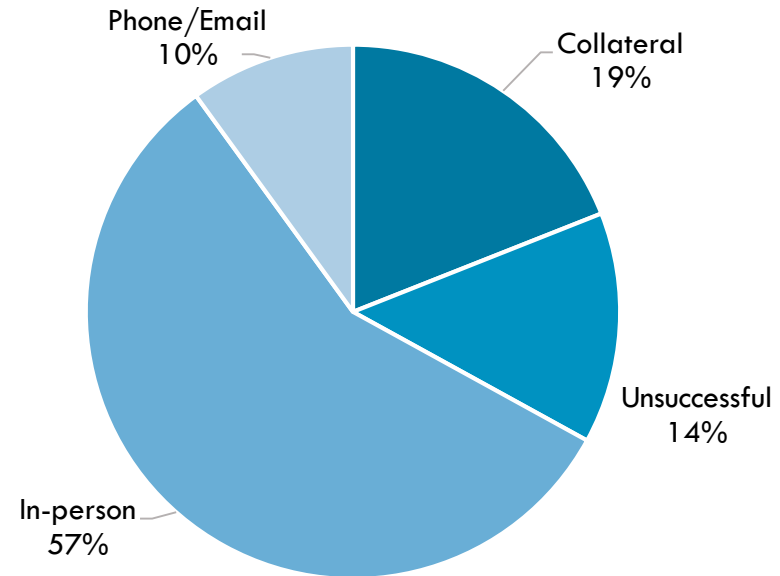


Outreach & Engagement

MHS has enrolled half of all AOT referred individuals to ACT through their ongoing outreach and engagement efforts.

Over 80% of MHS' contacts were successful in reaching the consumer or collateral.

Outreach and Engagement Outcome	Percent of Consumers	Number of Consumers
Enrolled in ACT Services	51%	70 total 54 voluntarily 16 with court involvement
Still Receiving Outreach and Engagement Services	12%	17
Not enrolled in ACT	37%	51



Consumer Profile

10

Category	ACT Consumers (n=70)
<i>Gender</i>	
Male	56% (n = 39)
Female	44% (n = 31)
<i>Race and Ethnicity</i>	
Black or African American	19% (n = 13)
Hispanic	16% (n = 11)
White	56% (n = 39)
Other or Unknown	9% (n = 7)
<i>Age at Enrollment</i>	
18 – 25	21% (n = 15)
26+	79% (n = 55)

- **The majority of ACT consumers (64%, n = 45) have a primary diagnosis of a psychotic disorder, and 71% (n = 50) had a co-occurring substance use disorder at the time of enrollment.**
- **Of the ACT consumers for whom there was data (n = 63):**
 - **71% had a GED or higher education level at the time of enrollment**
 - **59% were unemployed in the 12 months prior to enrolling in ACT.**
 - **49% received supplemental security income in the 12 months prior to enrolling in ACT.**

ACT Fidelity

11

Domain	Criterion	2017 Rating	2018 Rating
Human Resources: Structure and Composition	Small caseload	5	5
	Team approach	4	5
	Program meeting	5	5
	Practicing ACT leader	4	5
	Continuity of staffing	3	4
	Staff capacity	4	4
	Psychiatrist on team	5	5
	Nurse on team	5	5
	Substance abuse specialist on team	5	5
	Vocational specialist on team	5	5
	Program size	5	5
Organizational Boundaries	Explicit admission criteria	2	5
	Intake rate	5	5
	Full responsibility for treatment services	5	5
	Responsibility for crisis services	5	5
	Responsibility for hospital admissions	5	1
	Responsibility for hospital discharge planning	5	5
Time-unlimited services	5	5	

Domain	Criterion	2017 Rating	2018 Rating
Nature of Services	In vivo services	3	4
	No drop-out policy	3	5
	Assertive engagement mechanisms	2	5
	Intensity of services	5	4
	Frequency of contact	4	3
	Work with support system	5	5
	Individualized substance abuse treatment	5	3
	Co-occurring disorder treatment groups	5	3
	Co-occurring disorders model	5	5
	Role of consumers on treatment team	5	5

Overall	2017	2018
ACT Fidelity Score	4.42	4.50



ACT Service Participation (N = 62)*

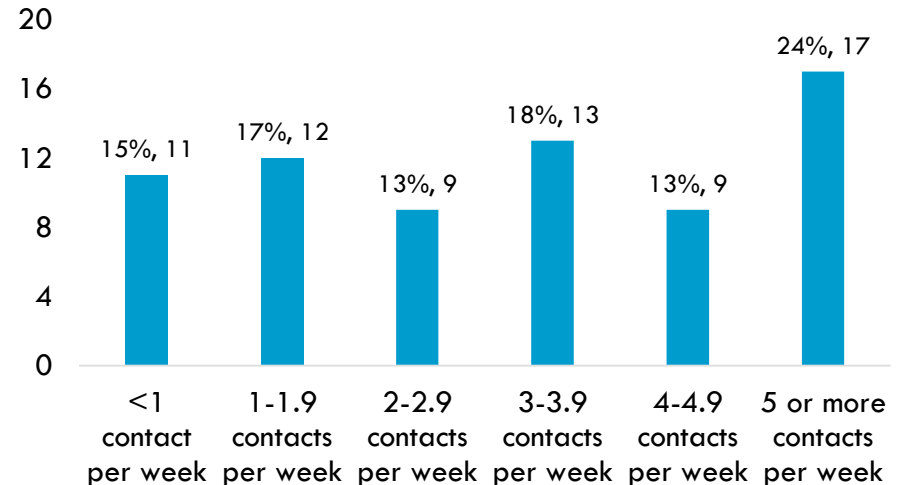
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ACT Services

- Avg. length of enrollment: 354 days
- Avg. number of face-to-face encounters: 4 per week
- Avg. hours of face to face encounters: 4 per week

ACT Treatment Adherence

- **Overall, 66% of ACT consumers were adherent to treatment.** In FY 16/17, 93% of consumers were adherent.



Crisis Episodes and Psychiatric Hospitalizations

13

The majority of consumers experienced fewer psychiatric hospitalizations and crisis episodes during ACT.

	Crisis Episodes Before ACT Enrollment	Crisis Episodes During ACT Enrollment
Number of Consumers	91%, n = 61	52%, n = 35
Average Number of Crisis Episodes	3.1 episodes per 180 days	2.2 episodes per 180 days
Average Length of Stay	1.4 days	1.2 days

	Psychiatric Hospitalizations Before ACT Enrollment	Psychiatric Hospitalizations During ACT Enrollment
Number of Consumers	55%, n = 37	31%, n = 21
Average Number of Hospitalizations	1.0 episodes per 180 days	0.7 episodes per 180 days
Average Length of Stay	7.3 days*	10.0 days**

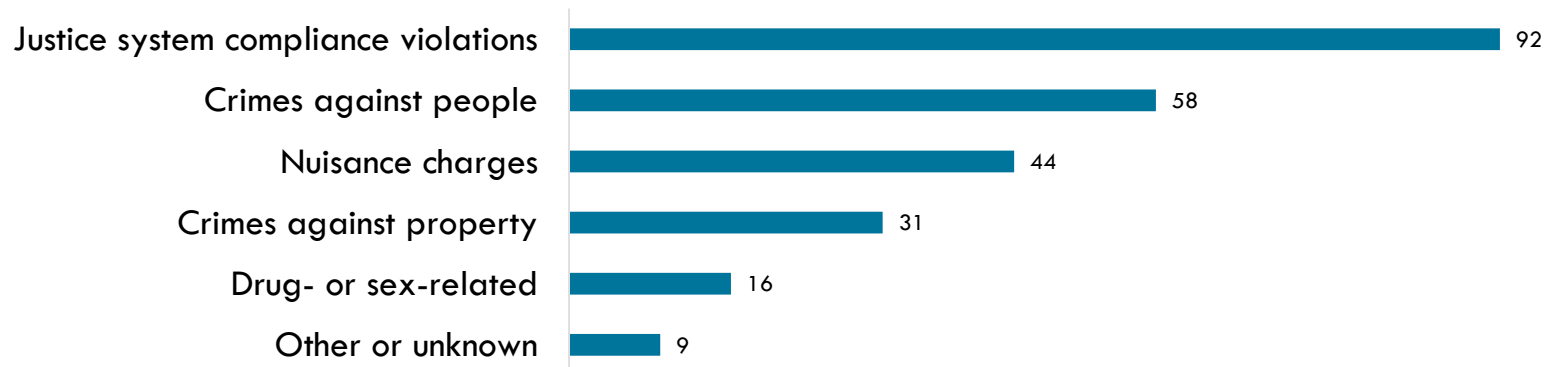
Criminal Justice Outcomes

14

Significantly fewer ACT consumers were arrested and booked during ACT enrollment

	Jail Bookings Before ACT Enrollment	Jail Bookings During ACT Enrollment
Number of Consumers	67%, n = 45	31%, n = 21
Average Number of Crisis Episodes	2.3 episodes per 180 days	2.4 episodes per 180 days
Average Length of Stay	29 days	18.5 days

Types of Charges during ACT Enrollment



Housing Status

15

The majority of consumers (62%, n = 33) either obtained or maintained housing while in ACT.

Consumers who obtained housing

- **13%** of consumers were not housed before ACT but obtained housing while enrolled

Consumers who maintained housing

- **49%** of consumers were housed before ACT and continued to maintain housing while enrolled

Consumers who were not stably housed

- **9%** of consumers were housed before ACT but did not maintain housing during ACT
- **28%** of consumers were not housed before or during ACT enrollment

AOT Costs

FY 17/18 AOT Budget and Actual Expenses

Partner	FY 17/18 Budget	FY 17/18 Actual Costs
MHS	\$2,014,000	\$1,560,080
CCBHS	\$350,000	\$252,839
County Counsel	\$157,000	\$32,379
Public Defender	\$133,500	\$56,250
Superior Court	\$128,000	\$2,585
Total	\$2,782,500	\$1,904,133

County anticipated 70% of all services provided would be billable and 35% of the revenue would therefore come from Medi-Cal FFP. Total billing for FY17/18 was \$383,163 (25% of actual expenses), which is below what was anticipated.

AOT Cost Savings

17

Pre- and Post-Enrollment Cost Comparison

	Pre- Enrollment	Post- Enrollment	Total Difference	Annual Estimate
Outpatient and Residential Mental Health Services	\$5,280,971	\$3,868,976	\$1,411,995	\$584,274
Psychiatric Hospitalization	\$2,167,051	\$1,049,866	\$1,117,185	\$462,283
Jail Bed Days	\$507,722	\$194,192	\$313,530	\$129,737
<i>Total Mental Health Services</i>	\$7,448,022	\$4,918,842	\$2,529,180	\$1,046,557
<i>Total Mental Health and Jail</i>	\$7,955,744	\$5,113,034	\$2,842,710	\$1,176,294

AOT reduced the overall cost of care for the 70 enrolled individuals by \$2,842,710. Of this amount, AOT produced a hard cost savings of \$1,117,185 over the first 29 months of implementation. Accounting for FY 17/18 operations costs, AOT produced \$371,069 in hard costs savings.

Findings: Research Question 2

- What are the differences in demographics, service patterns, and outcomes between those who agree to participate in ACT services voluntarily and those who participate with an AOT court order or voluntary settlement agreement?

Consumer Profile and Pre-Enrollment Outcomes

19

Among the 70 consumers who enrolled in AOT since program implementation, 16 enrolled with court involvement.

There are few differences in the demographics or diagnoses between individuals enrolled in ACT voluntarily and through the court.

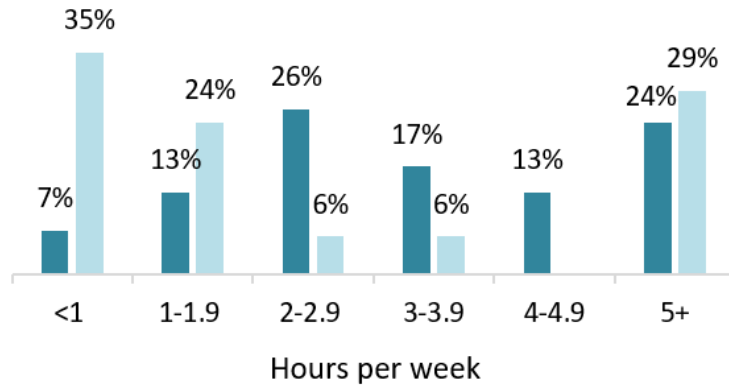
While consumers in both groups received comparable amounts of outreach and engagement from MHS, it took more time for the Care Team to enroll court-involved individuals.

Service Utilization

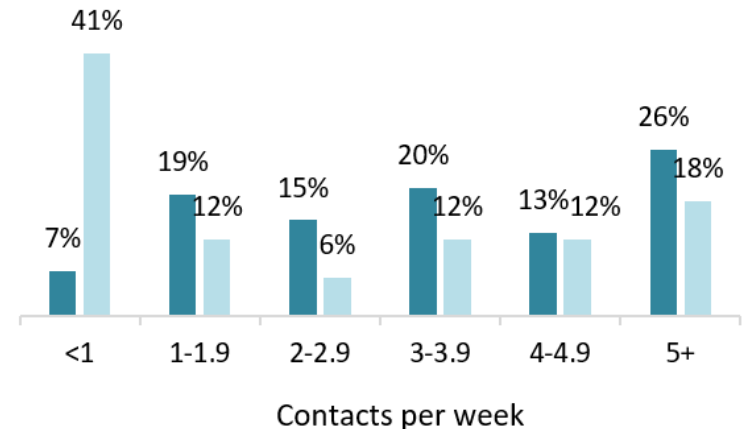
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A larger proportion of court-involved consumers have lower service participation compared to voluntarily enrolled consumers.

Intensity of ACT Contacts per Week



Frequency of ACT Contacts per Week



■ Voluntary ■ Court-Involved

Crisis Episodes and Psychiatric Hospitalizations

21

Individuals who enrolled voluntarily saw a substantial decrease in crisis episodes and inpatient hospitalizations during ACT.

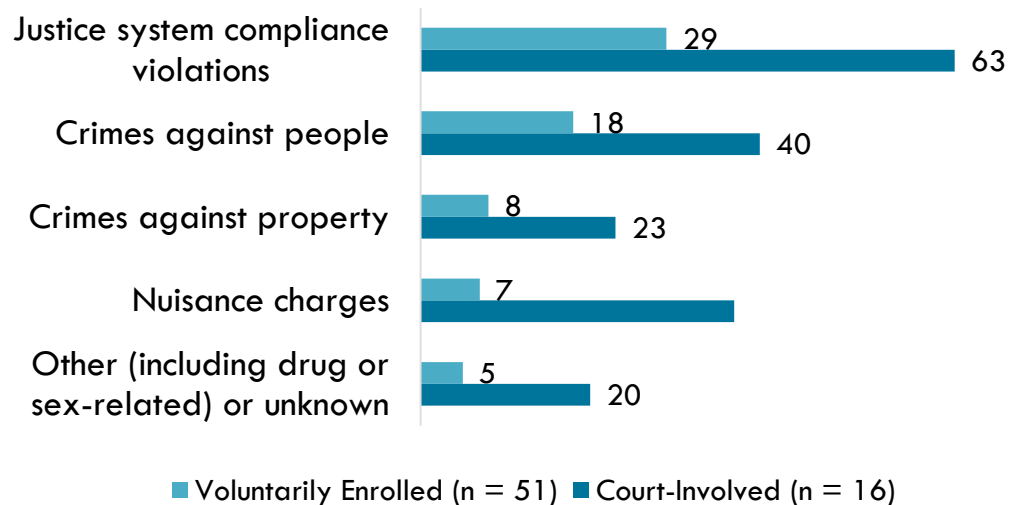
		<i>Before ACT Enrollment</i>		<i>During ACT Enrollment</i>	
		<i>Crisis</i>	<i>Hospitalization</i>	<i>Crisis</i>	<i>Hospitalization</i>
Voluntarily Enrolled ACT Consumers (n = 51)	Number of Consumers	90%, n = 46	53%, n = 27	47%, n = 24	24%, n = 12
	Average Number of Episodes	3.2 episodes per 180 days	1.1 episodes per 180 days	2.1 episodes per 180 days	0.8 episodes per 180 days
	Average Length of Stay	1.5 days	13.3 days	1.2 days	25.8 days
Court-Involved ACT Consumers (n = 16)	Number of Consumers	94%, n = 15	63%, n = 10	69%, n = 11	56%, n = 9
	Average Number of Episodes	2.9 episodes per 180 days	0.9 episodes per 180 days	2.7 episodes per 180 days	0.8 episodes per 180 days
	Average Length of Stay	1.3 days	8.1 days	1.2 days	21.3 days

Criminal Justice Outcomes

Individuals who enrolled voluntarily saw a substantial decrease in jail bookings during ACT.

		Before ACT enrollment	During ACT enrollment
Voluntarily Enrolled (n = 51)	Number and % of Consumers w/ Jail Bookings	61%, n = 31 (1.7 bookings per 180 days)	20%, n = 10 (.7 bookings per 180 days)
Court Enrolled (n = 16)	Number of % Consumers w/ Jail Bookings	88%, n = 14 (3.6 bookings per 180 days)	69%, n = 11 (3.9 bookings per 180 days)

A greater proportion of court-involved consumers were booked into county jail before and after AOT enrollment, and charged with more criminal offense and justice system compliance violations.



Housing Outcomes

23



A larger proportion of voluntarily enrolled consumers were stably housed compared to court-involved consumers.

Findings: Research Question 3

- What are the differences in demographics, service utilization, and outcomes between those who engage in existing FSP services and those who receive ACT services?

ACT and FSP Consumer Profiles

25

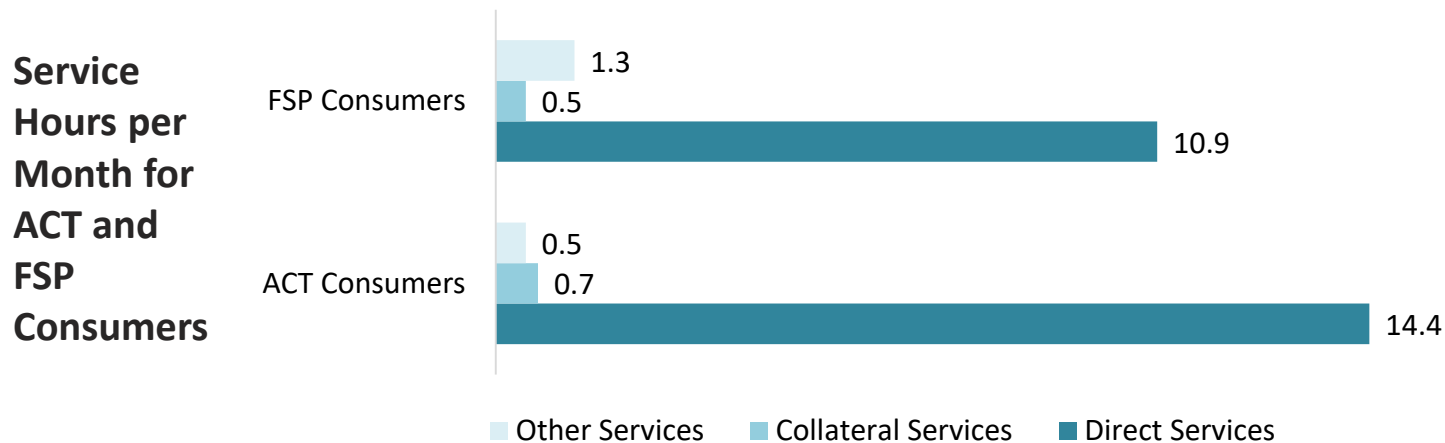
	ACT Consumers (N = 70)	FSP Consumers (N = 163)
Gender		
Male	56% (n = 39)	57% (n = 93)
Female	44% (n = 31)	43% (n = 70)
Race and Ethnicity		
Black or African American	19% (n = 13)	35% (n = 57)
Hispanic	16% (n = 11)	19% (n = 31)
White	56% (n = 39)	31% (n = 51)
Other or Unknown	9% (n = 7)	15% (n = 24)
Age at Enrollment		
18 – 25	21% (n = 15)	31% (n = 51)
26 +	79% (n = 55)	69% (n = 112)

- ***There are greater proportion of White consumers and smaller proportion of Black and Latino consumers enrolled in ACT compared to FSP.***
- ***ACT consumers were more likely to be diagnosed with a disorder that included psychosis (92% of ACT consumers vs. 62% of FSP consumers) and less likely to be diagnosed with unipolar depression.***

ACT and FSP Service Utilization

ACT consumers engaged in services more often, for longer durations, than FSP consumers.

	ACT Consumers (N = 71)		FSP Consumers (N = 167)	
	Average	Range	Average	Range
Length of Enrollment	354 days	33-830 days	400 days	38 – 880 days
Frequency of Service Encounters	3.8 face to face contacts per week	<1 – 13 face-to-face contacts per week	1.8 face-to-face contacts per week	<1 – 8 face-to-face contacts per week
Intensity of Services	3.6 hours of face-to-face contact per week	<1 – 12 hours of face-to-face contact per week	2.8 hours of face-to-face contact per week	<1 – 13 hours of face-to-face contact per week



ACT and FSP Consumer Crisis Episodes and Psychiatric Hospitalizations

27

ACT Consumers (N = 67)				
	<i>Before ACT Enrollment</i>		<i>During ACT Enrollment</i>	
	<i>Crisis</i>	<i>Hospitalization</i>	<i>Crisis</i>	<i>Hospitalization</i>
Number of Consumers	91%, n = 61	55%, n = 37	52%, n = 35	31%, n = 21
Average Number of Episodes	3.1 episodes per 180 days	1.0 episodes per 180 days	2.2 episodes per 180 days	0.7 episodes per 180 days
Average Length of Stay	1.4 days	7.6 days	1.2 days	10.0 days**
FSP Consumers (N = 163)				
	<i>Before FSP Enrollment</i>		<i>During FSP Enrollment</i>	
	<i>Crisis</i>	<i>Hospitalization</i>	<i>Crisis</i>	<i>Hospitalization</i>
Number of Consumers	75%, n = 122	42%, n = 68	43%, n = 70	19%, n = 31
Average Number of Episodes	1.5 episodes per 180 days	0.6 episodes per 180 days	2.3 episodes per 180 days	0.9 episodes per 180 days
Average Length of Stay	1.2 days	8.5 days*	1.2 days	8.1 days**

*Average is 12 days if 2 long term hospitalizations of over 100 days are retained;

** Average is 24 days if 2 long term hospitalizations of over 100 days are retained



Employment Outcomes

Between enrollment and July/August 2018 there is a 16% increase in ACT consumers with employment and 14% decrease in FSP consumers with employment.

Employment Measures	AOT Clients (MHS' ACT program)	FSP Clients
Employed at some point in 12 months prior to program enrollment (% Y/N)	<10%	18%
Length of employment in 12 months prior to program enrollment (# of weeks)	26.0 weeks	18.7 weeks
Average amount of employment in 12 months prior to program enrollment (hours/week)	24.3 hours/week	22.4 hours/week
Employed at some point in 30 days prior to program enrollment (% Y/N)	<10%	18%
Employed at some point during July/August 2018 (% Y/N)	21%	7%
Average amount of employment in 30 days prior to program enrollment (hours/week)	16.5 hours/week	20.0 hours/week
Average amount of employment in July/August 2018 (hours/week)	25.0 hours/week	17.2 hours/week

29

Questions and Answers

Roberta Chambers, PsyD
rchambers@resourcedevelopment.net
510.984.1478

