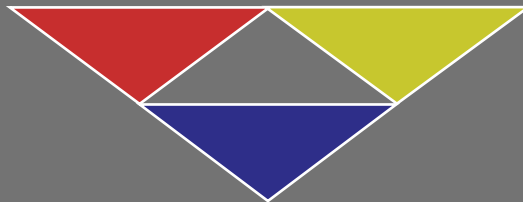


February 2019

Missouri Department of Mental Health

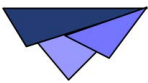
# Quarterly Performance Measures



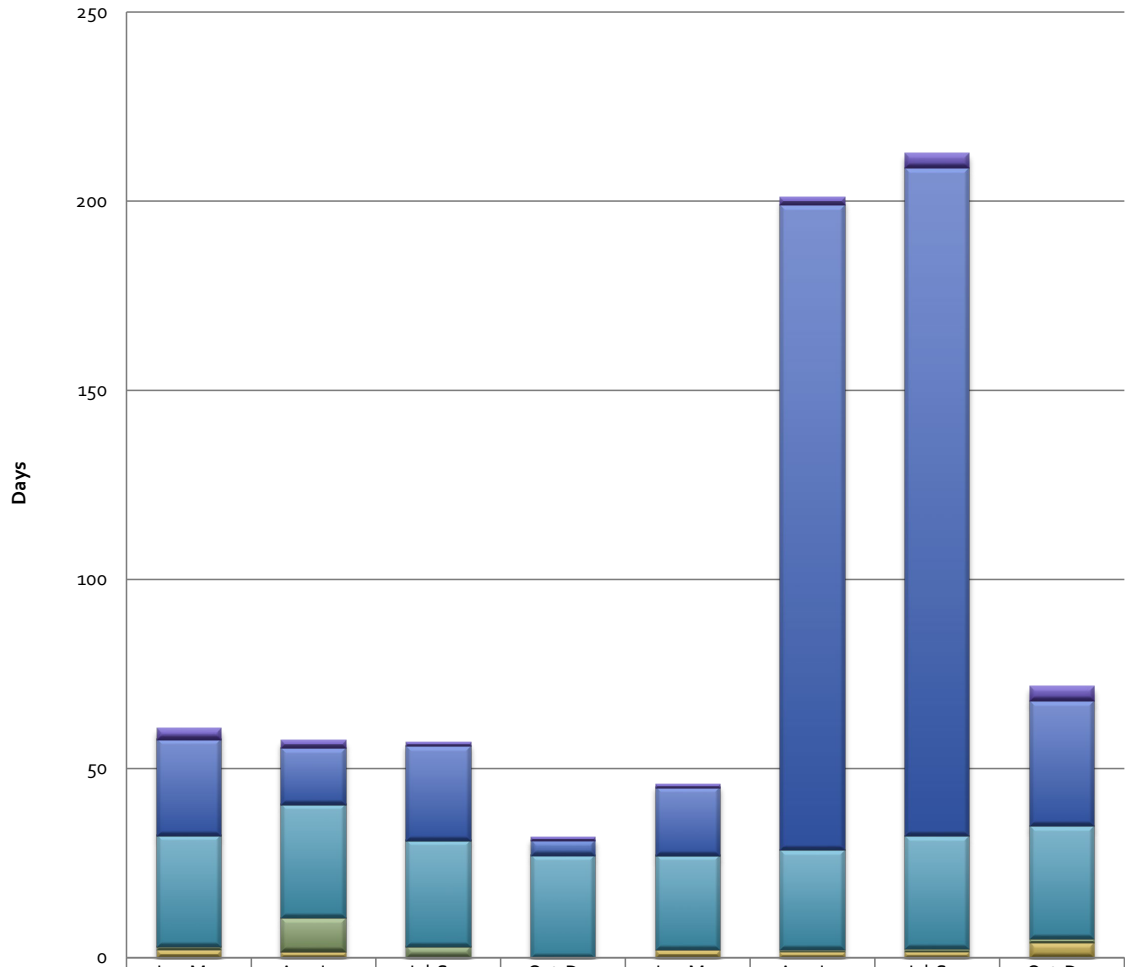


# Division of Behavioral Health

## Substance Use Services



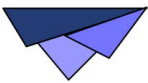
## Substance Use Treatment Community Investigations Timelines



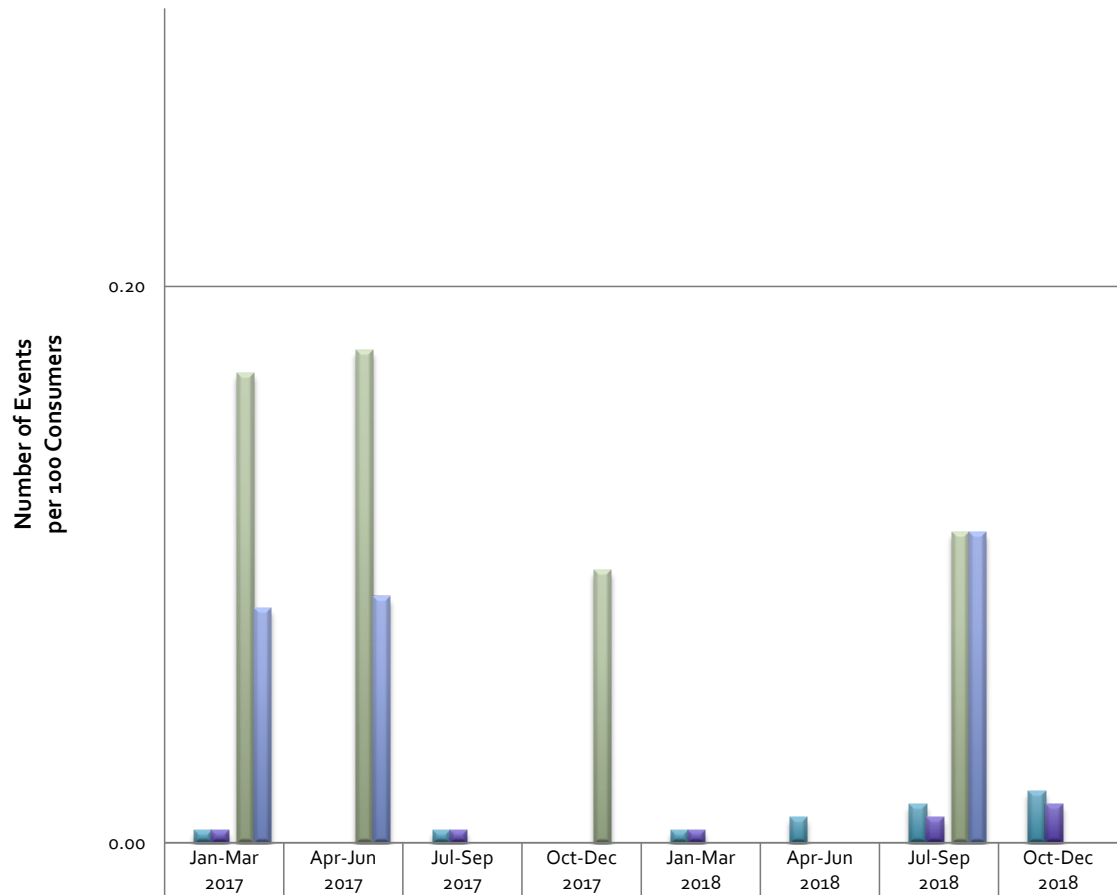
	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
Community Event Count	3	2	1	1	1	2	4	4
Inv. Final Report to Final Determin.	25.3	15.0	25.0	4.0	18.0	170.5	176.5	33.0
Inv. Request to Final Report	29.3	30.0	28.0	27.0	25.0	26.5	30.0	29.8
Notification to Inv. Request	1.0	9.0	3.0	0.0	0.0	0.5	0.8	1.0
Event Discovery to Notification	2.0	1.5	0.0	0.0	2.0	1.5	1.5	4.0

NOTE: Timelines are divided into 4 distinct sections or stages of an investigation. The bars include average times for all final determinations made in each quarter.

**Significance: Community investigations for substance use treatment are relatively few.**



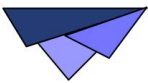
## Substance Use Treatment Abuse/Neglect Investigations



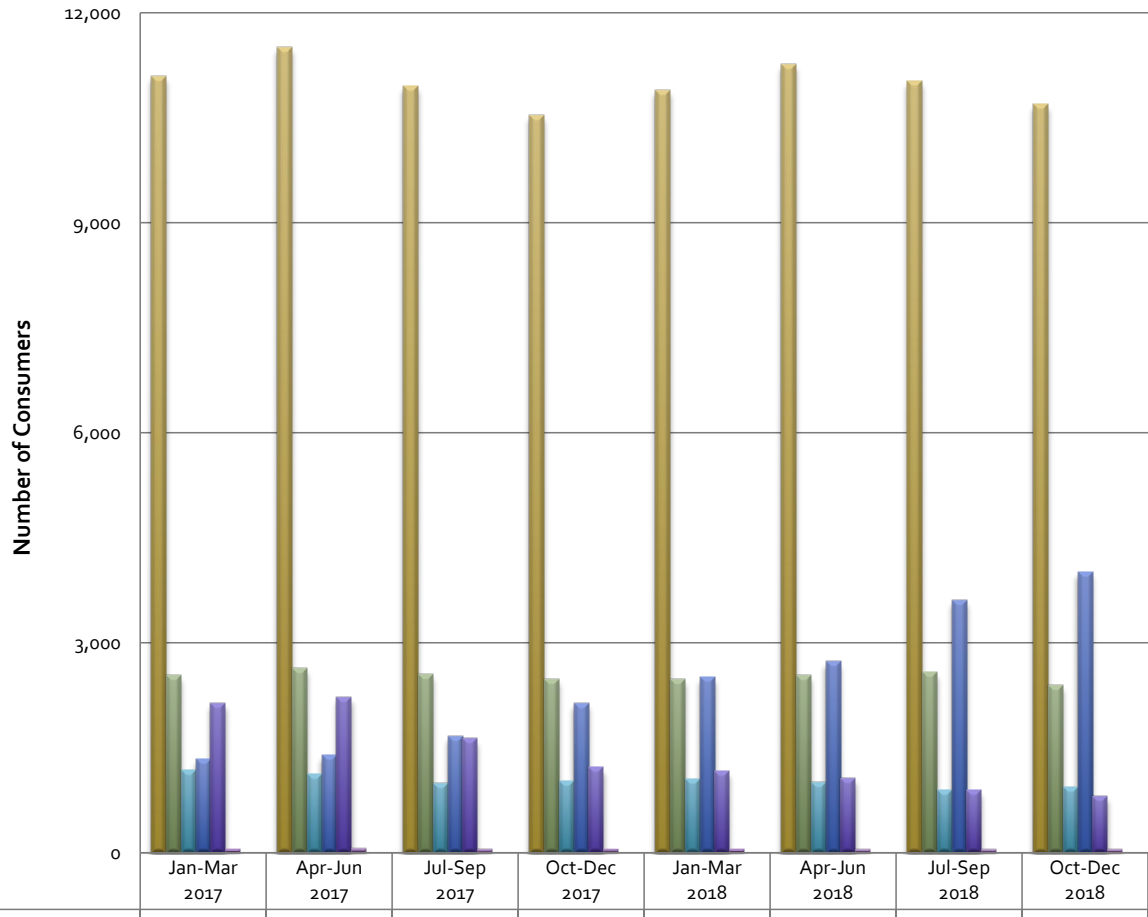
	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
# Adult Consumers	21,686	22,228	21,329	20,657	21,437	21,539	21,709	21,483
Adult A/N Investigations Completed	1	0	1	0	1	2	3	4
Adult A/N Investigations Rate	0.005	0.000	0.005	0.000	0.005	0.009	0.014	0.019
Adult A/N Substantiated	1	0	1	0	1	0	2	3
Adult A/N Substantiation Rate	0.005	0.000	0.005	0.000	0.005	0.000	0.009	0.014
# Youth Consumers	1,184	1,130	998	1,020	1,052	1,010	894	939
Youth A/N Investigations Completed	2	2	0	1	0	0	1	0
Youth A/N Investigations Rate	0.169	0.177	0.000	0.098	0.000	0.000	0.112	0.000
Youth A/N Substantiated	1	1	0	0	0	0	1	0
Youth A/N Substantiation Rate	0.084	0.088	0.000	0.000	0.000	0.000	0.112	0.000

NOTE: Investigations and substantiations are a count of the number of investigations, not the number of alleged perpetrators or victims. Also, Investigation and substantiation counts reflect cases finalized in the quarter.

**Significance:** Substance use treatment has relatively few abuse/neglect investigations and substantiations each quarter.



## Substance Use Treatment Consumers Served By Program

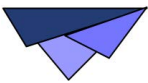


	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
CSTAR Gen Adult	11,102	11,505	10,958	10,536	10,898	11,267	11,026	10,694
CSTAR W&C	2,536	2,632	2,557	2,483	2,483	2,541	2,578	2,394
CSTAR Adol	1,180	1,123	991	1,022	1,052	1,013	888	930
CSTAR Opioid Tx	1,343	1,393	1,666	2,136	2,504	2,731	3,611	4,016
Primary Recovery & Tx	2,143	2,220	1,631	1,215	1,165	1,066	890	812
Compulsive Gambling	54	60	58	46	53	49	52	49
Unduplicated Number of ADA Served	22,870	23,358	22,327	21,667	22,489	22,548	22,523	22,239

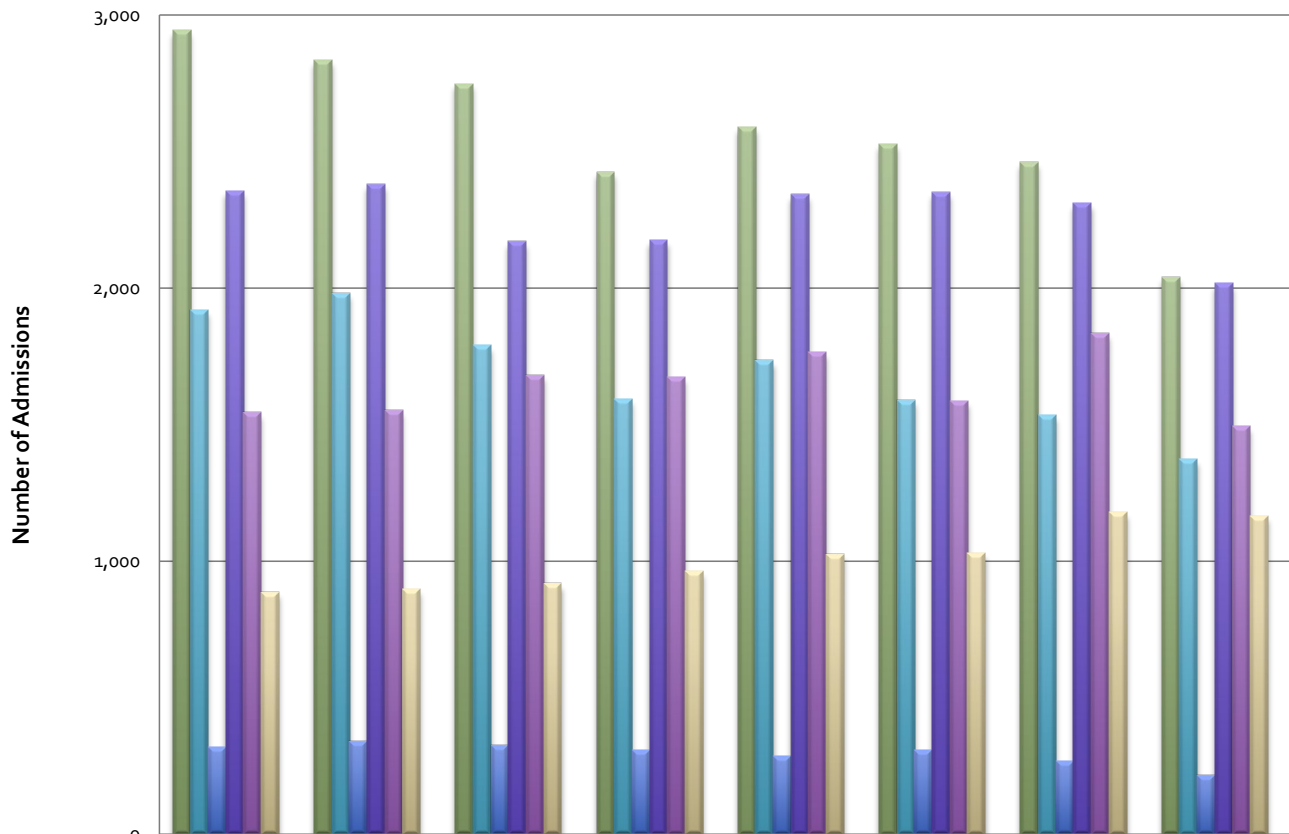
**CAUTION:** Data from July 2017 onward may be incomplete due to a delay in submission of encounters to CIMOR as the result of the CCBHC project.

NOTES: Consumers could be enrolled in more than one program during the quarter. For example, a consumer will generally be enrolled in both an Opioid Treatment program and a CSTAR or a Primary Recovery Program. Primary Recovery & Tx includes DOC specialty programs Free and Clean Plus and Partnership for Community Restoration, the Medication Assisted Treatment Grant, and the Opioid State Targeted Response Grant.

**Significance:** The majority of consumers receiving treatment services are in a CSTAR program.



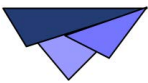
## Drug of Choice at Admission to Substance Use Treatment



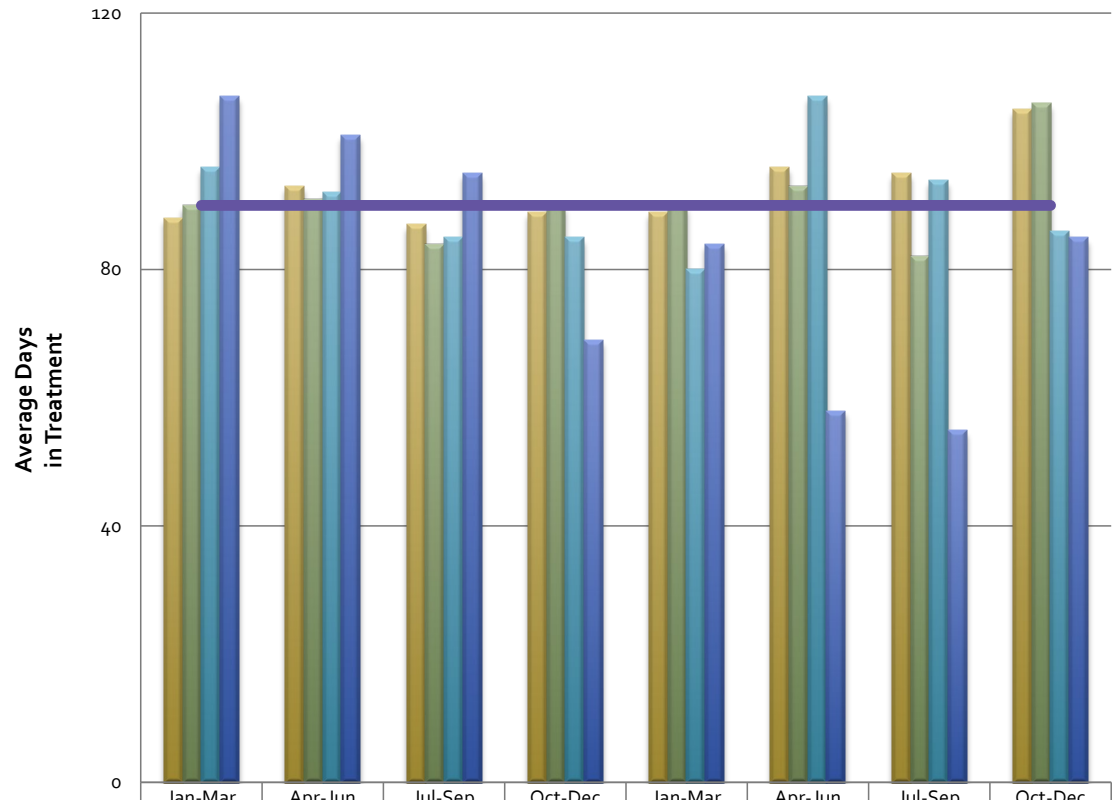
	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
Alcohol	2,946	2,836	2,749	2,424	2,589	2,527	2,462	2,042
% Alcohol	29.5%	28.4%	28.5%	26.5%	26.6%	26.9%	25.7%	24.6%
Marijuana	1,921	1,982	1,790	1,593	1,735	1,592	1,535	1,373
% Marijuana	19.3%	19.8%	18.6%	17.4%	17.8%	16.9%	16.0%	16.5%
Cocaine	320	343	326	309	286	308	267	218
% Cocaine	3.2%	3.4%	3.4%	3.4%	2.9%	3.3%	2.8%	2.6%
Methamphetamine	2,355	2,380	2,171	2,177	2,343	2,352	2,313	2,017
% Methamphetamine	23.6%	23.8%	22.5%	23.8%	24.0%	25.0%	24.1%	24.3%
Heroin	1,545	1,555	1,681	1,676	1,767	1,588	1,834	1,494
% Heroin	15.5%	15.6%	17.4%	18.3%	18.1%	16.9%	19.1%	18.0%
Other Drugs	887	898	919	963	1,027	1,031	1,181	1,165
% Other Drugs	8.9%	9.0%	9.5%	10.5%	10.5%	11.0%	12.3%	14.0%

**CAUTION:** Data from July 2017 onward may be incomplete due to a delay in submission of encounters to CIMOR as the result of the CCBHC project.

Significance: Illicit drug admissions account for about 69 - 73% of all admissions to substance use treatment.



## Retention In Substance Use Treatment

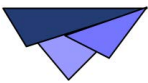


	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
CSTAR Gen Adult - N	4,418	4,831	4,424	4,190	3,803	3,955	3,412	3,136
CSTAR Gen Adult - Avg Days	88	93	87	89	89	96	95	105
CSTAR W&C - N	1,103	1,135	1,023	963	991	960	863	858
CSTAR W&C - Avg Days	90	91	84	90	90	93	82	106
CSTAR Adol - N	529	577	446	415	404	458	359	359
CSTAR Adol - Avg Days	96	92	85	85	80	107	94	86
Primary Recovery & Tx - N	719	920	816	689	718	628	652	645
Primary Recovery & Tx - Avg Days	107	101	95	69	84	58	55	85
# of Outliers	437	453	441	379	412	461	345	549
NIDA recommended minimum (days)	90	90	90	90	90	90	90	90

NOTE: Average days in treatment include both residential and outpatient services. Length of stay was calculated using the program admission date and the last date of billable service. Outliers greater than two standard deviations above the mean or less than or equal to 1 day were not included when calculating the average length of stay. Single day events are also excluded. Excludes detox.

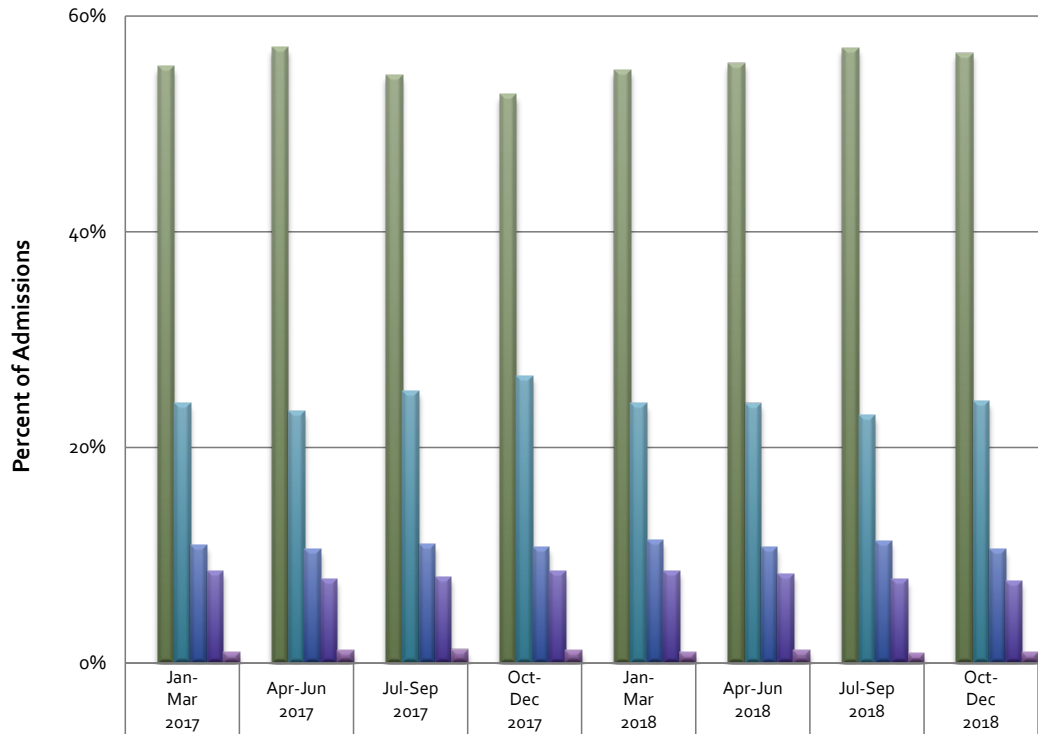
NIDA's Principles of Drug Addiction Treatment states: "The appropriate duration for an individual depends on the type and degree of his or her problem and needs. Research indicates that most addicted individuals need at least three months in treatment to significantly reduce or stop their drug use and that the best outcomes occur with longer durations of treatment."

**Significance: Average length of stay in substance use treatment is around 3 months.**



## Adult Substance Use Treatment Admissions With Prior Substance Use Treatment Episodes in Past 36 Months

NOTE: One study found that the median time from first treatment to 1 alcohol-and drug-free year was 9 years - with 3 to 4 episodes of treatment.<sup>1</sup>  
<sup>1</sup>Dennis, M.L. et al, 2005. The duration and correlates of addiction and treatment careers. Journal of Substance Abuse Treatment 28 (Suppl.1):S51-S62

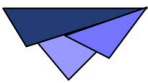


	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
Adult Consumers Admitted to Tx	7,468	7,471	7,492	7,335	7,791	7,652	8,097	7,299
Adult Consumers with Previous Tx	3,336	3,206	3,406	3,458	3,507	3,395	3,477	3,172
Adult Consumers Admitted with Previous Tx Pct	44.7%	42.9%	45.5%	47.1%	45.0%	44.4%	42.9%	43.5%
0 Prior Tx Episodes	4,132	4,265	4,086	3,867	4,284	4,257	4,620	4,127
0 Prior Tx Episodes Pct	55.3%	57.1%	54.5%	52.7%	55.0%	55.6%	57.1%	56.5%
1 Prior Tx Episode	1,802	1,747	1,888	1,955	1,875	1,846	1,860	1,771
1 Prior Tx Episode Pct	24.1%	23.4%	25.2%	26.7%	24.1%	24.1%	23.0%	24.3%
2 Prior Tx Episodes	819	790	826	791	891	822	914	770
2 Prior Tx Episodes Pct	11.0%	10.6%	11.0%	10.8%	11.4%	10.7%	11.3%	10.5%
3 - 5 Prior Tx Episodes	637	582	598	627	664	633	627	556
3 - 5 Prior Tx Episodes Pct	8.5%	7.8%	8.0%	8.5%	8.5%	8.3%	7.7%	7.6%
6 + Prior Tx Episodes	78	87	94	85	77	94	76	75
6 + Prior Tx Episodes Pct	1.0%	1.2%	1.3%	1.2%	1.0%	1.2%	0.9%	1.0%

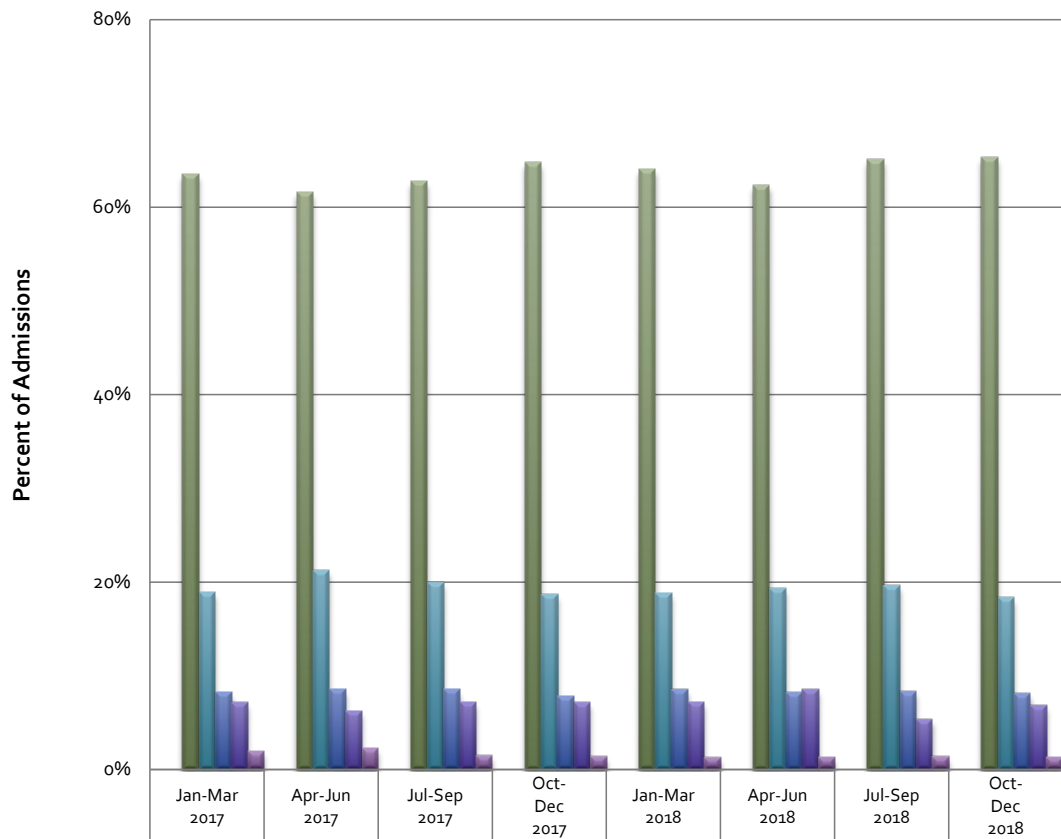
NOTE: The above data includes only treatment programs within 36 months of consumers' last admission within the quarter. Detox, SATOP, Recovery Support and Compulsive Gambling episodes of care were not included.

**Significance:** Half of admissions are for consumers who have not been enrolled in a treatment episode of care within the past 36 months. Approximately 10% of consumers admitted to a treatment episode of care have had 3 or more prior treatment episodes of care within





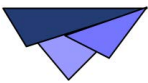
## Adult Detox Admissions With Prior Detox Episodes in Past 36 Months



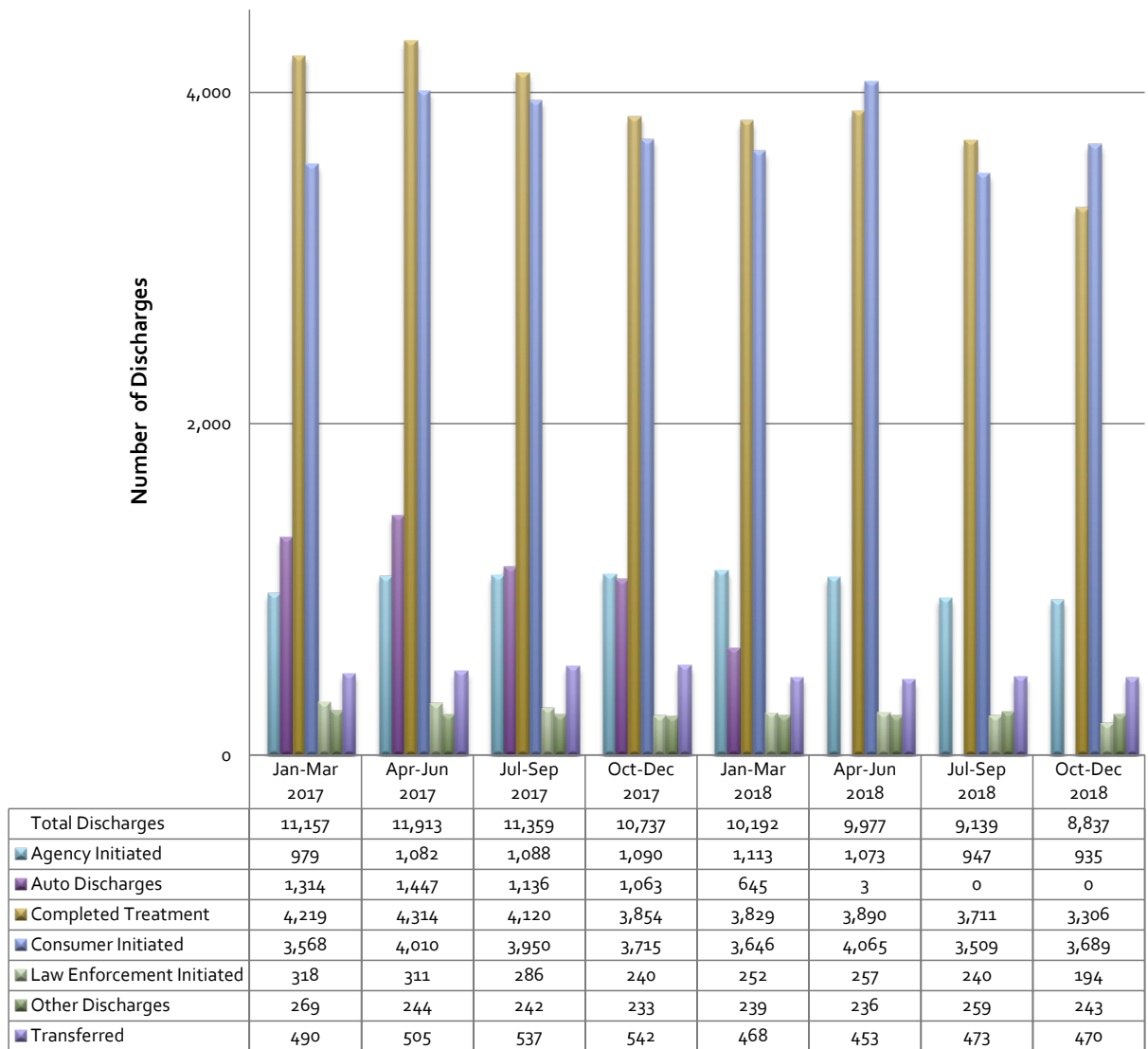
	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
Consumers Admitted to Detox	1618	1639	1687	1503	1506	1338	1339	1183
Consumers with Previous Detox	590	630	628	529	541	503	467	410
Consumers Admitted with Previous Detox Pct	36.5%	38.4%	37.2%	35.2%	35.9%	37.6%	34.9%	34.7%
0 Prior Detox Episodes	1,028	1,009	1,059	974	965	835	872	773
0 Prior Detox Episodes Pct	63.5%	61.6%	62.8%	64.8%	64.1%	62.4%	65.1%	65.3%
1 Prior Detox Episode	307	349	337	282	284	259	264	217
1 Prior Detox Episode Pct	19.0%	21.3%	20.0%	18.8%	18.9%	19.4%	19.7%	18.3%
2 Prior Detox Episodes	134	140	144	117	129	111	112	96
2 Prior Detox Episodes Pct	8.3%	8.5%	8.5%	7.8%	8.6%	8.3%	8.4%	8.1%
3 - 5 Prior Detox Episodes	117	103	121	108	108	115	72	81
3 - 5 Prior Detox Episodes Pct	7.2%	6.3%	7.2%	7.2%	7.2%	8.6%	5.4%	6.8%
6 + Prior Detox Episodes	32	38	26	22	20	18	19	16
6 + Prior Detox Episodes Pct	2.0%	2.3%	1.5%	1.5%	1.3%	1.3%	1.4%	1.4%

NOTE: The above data includes only detox programs within 36 months of consumers' last admission within the quarter. **Significance:**

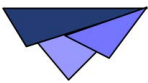
**More than one-half of detox admissions (61-65%) are for consumers who have not been in detox within the past 36**



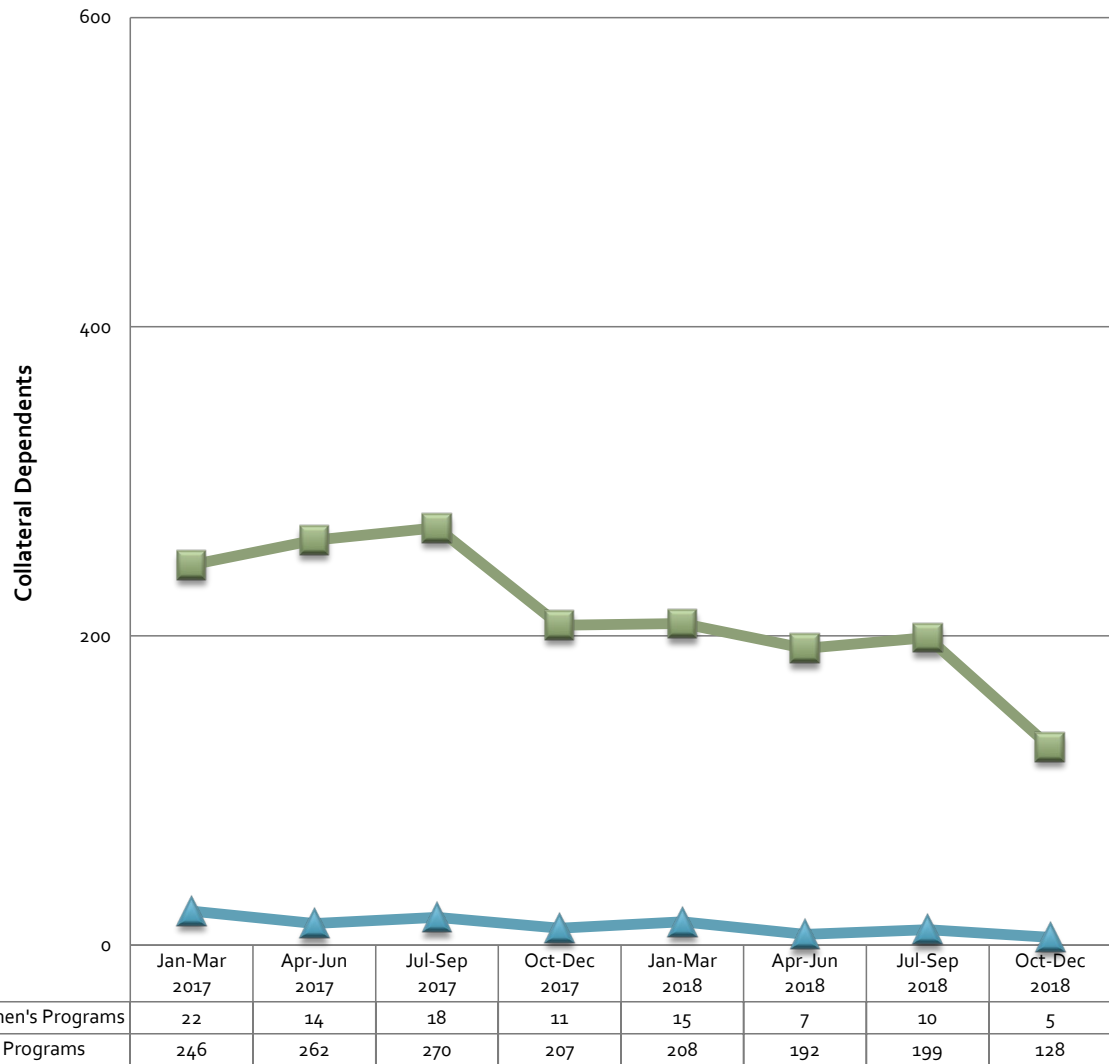
## Substance Use Treatment Discharges



NOTE: Other discharges category includes the following discharge reasons: consumer died; consumer moved away; medical reasons. On July 25, 2008 the monthly Auto Discharge program was implemented and closed all episodes of care that had no service or billing activity within the past six months. The episode of care was closed and the discharge date was set to the last date of billable service. This will cause an increase in the number of Auto Discharges in previous quarters. The number of auto discharges in the two most recent quarters are not comparable to that of prior quarters because insufficient time as lapsed for the case to be considered inactive. Recovery support only episodes are excluded.

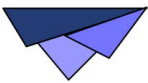


## Collateral Dependents Served



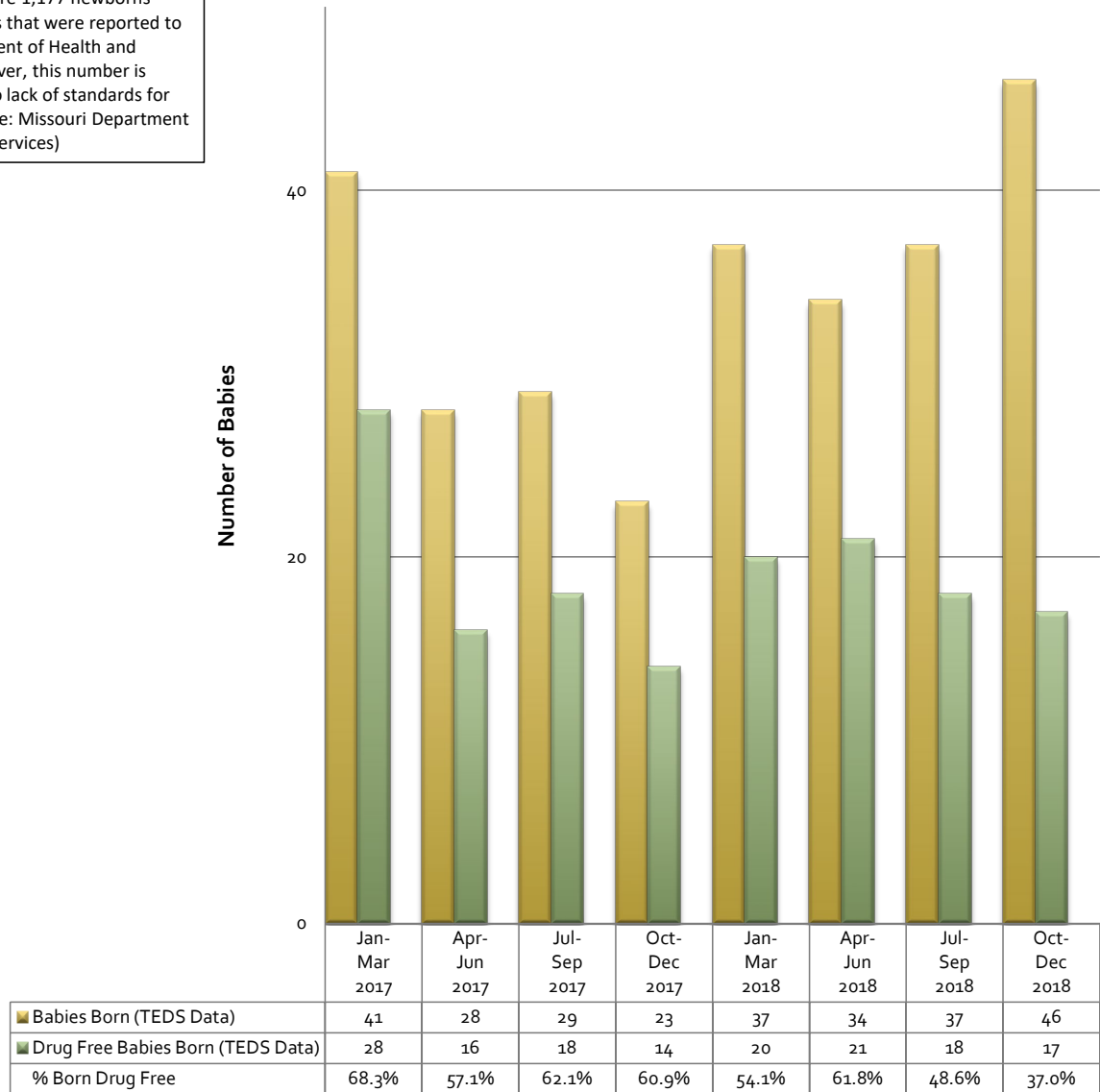
NOTE: A collateral dependent has no substance use disorder but is seeking services because of problems arising from his or her relationship with an individual who has a substance use disorder and is engaged in treatment.

**Significance:** The majority of collateral dependents are served in the CSTAR Women and Children's Programs. The number will vary each quarter due to several factors including number of consumers in treatment and number of consumers with children and/or a significant other.



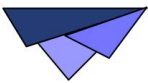
## Babies Born Drug Free

During 2015, there were 1,177 newborns affected by illicit drugs that were reported to the Missouri Department of Health and Senior Services. However, this number is under-reported due to lack of standards for reporting. (Data Source: Missouri Department of Health and Senior Services)



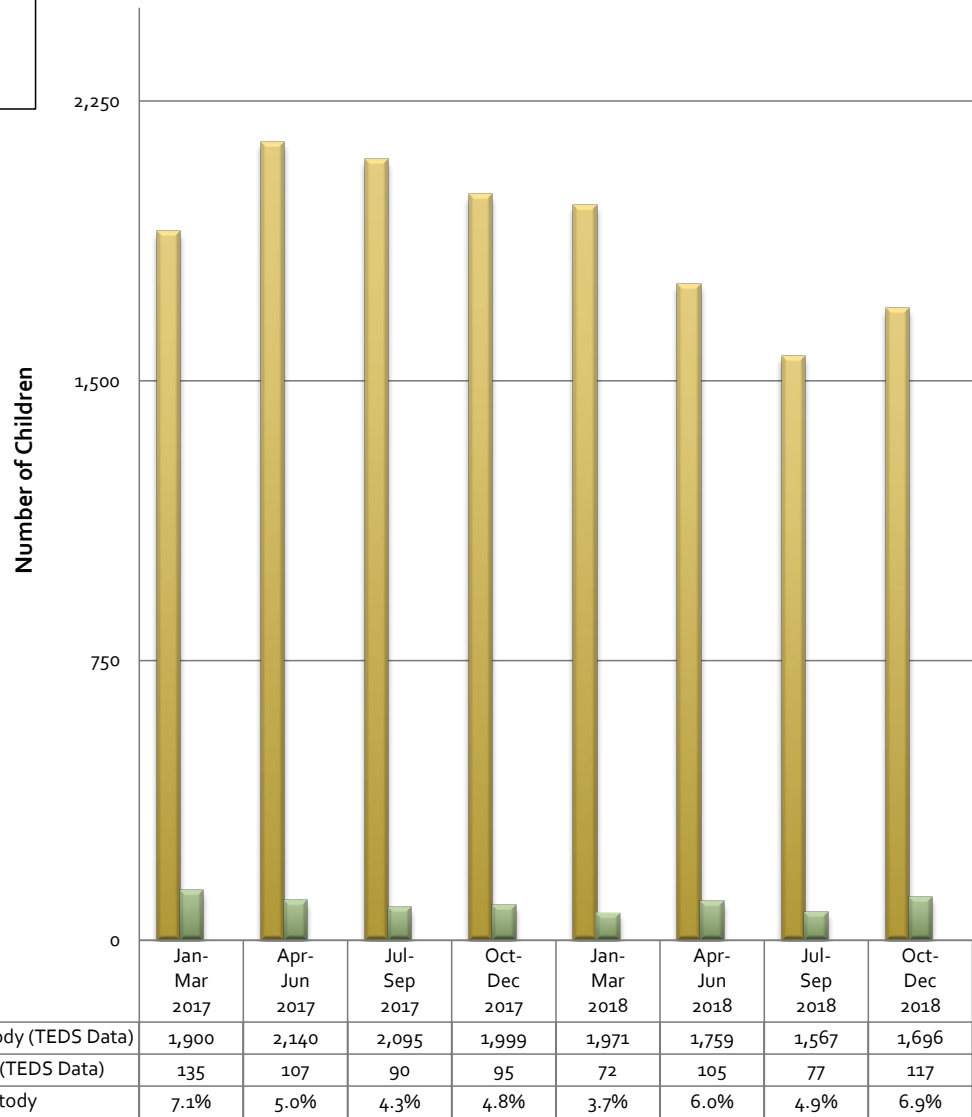
NOTE: In May 2010, TEDS data collection pages in CIMOR were upgraded to collect the number of babies born drug free during treatment for all female consumers in treatment and is collected when the program is closed. Due to this change, the data from previous reports are not comparable.

**Significance:** The number will vary due to several factors including number of pregnant women enrolled that had a baby during



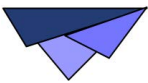
## Children Returned to Custody

During 2016, there were 3,216 children removed from their homes due to parental alcohol and/or drug use. (Data Source: Missouri Department of Social Services)



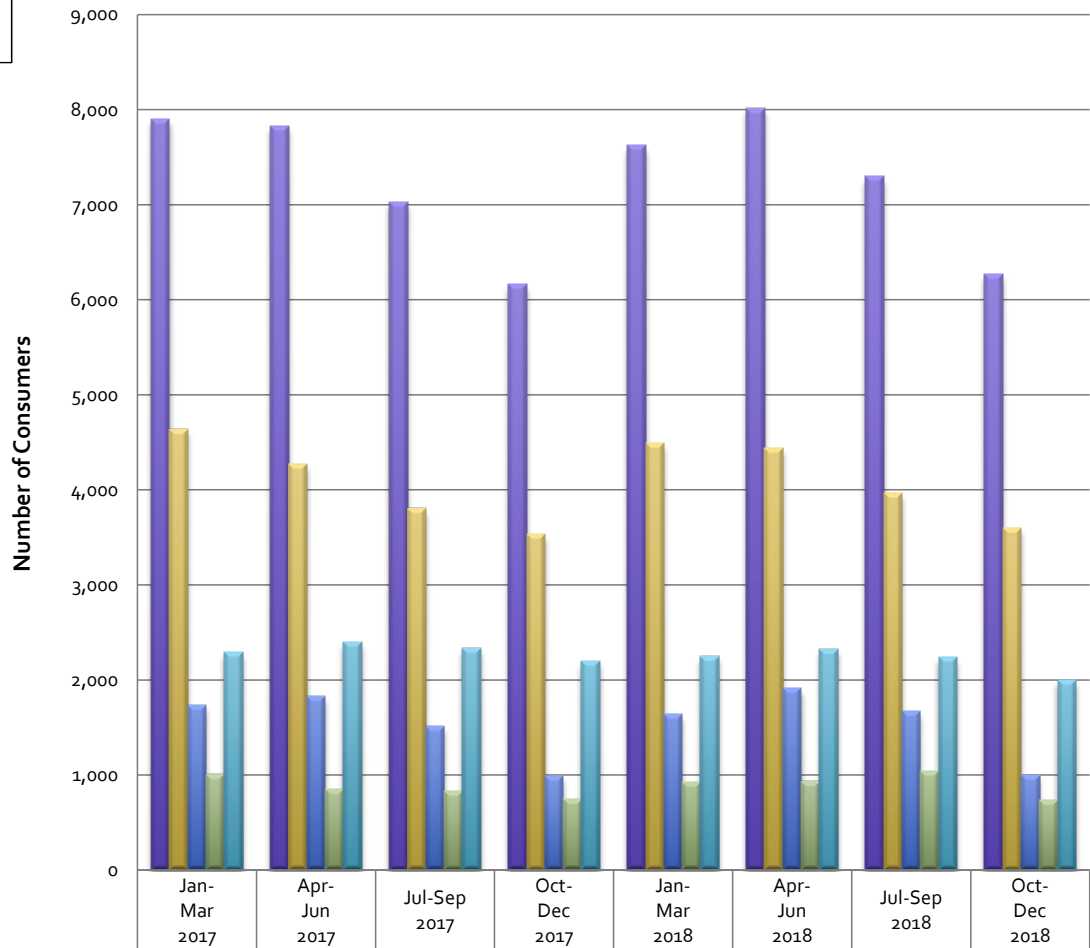
NOTE: In May 2010, TEDS data collection pages in CIMOR were upgraded to collect the number of children returned to custody for all consumers in treatment and is collected when the program is closed.

**Significance:** The chart shows the number of children returned to the parent/guardian while in any treatment program. The number will vary each quarter due to several factors such as, number of consumers who have had a substance use program closed within the quarter who have had children removed from custody and the number of children in the family.



## Substance Awareness Traffic Offenders Program (SATOP) Consumers Served

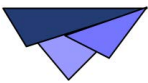
The annual number of DWI arrests have been trending downward: 35,543 in 2009 to 22,457 in 2016. Data Source: Missouri



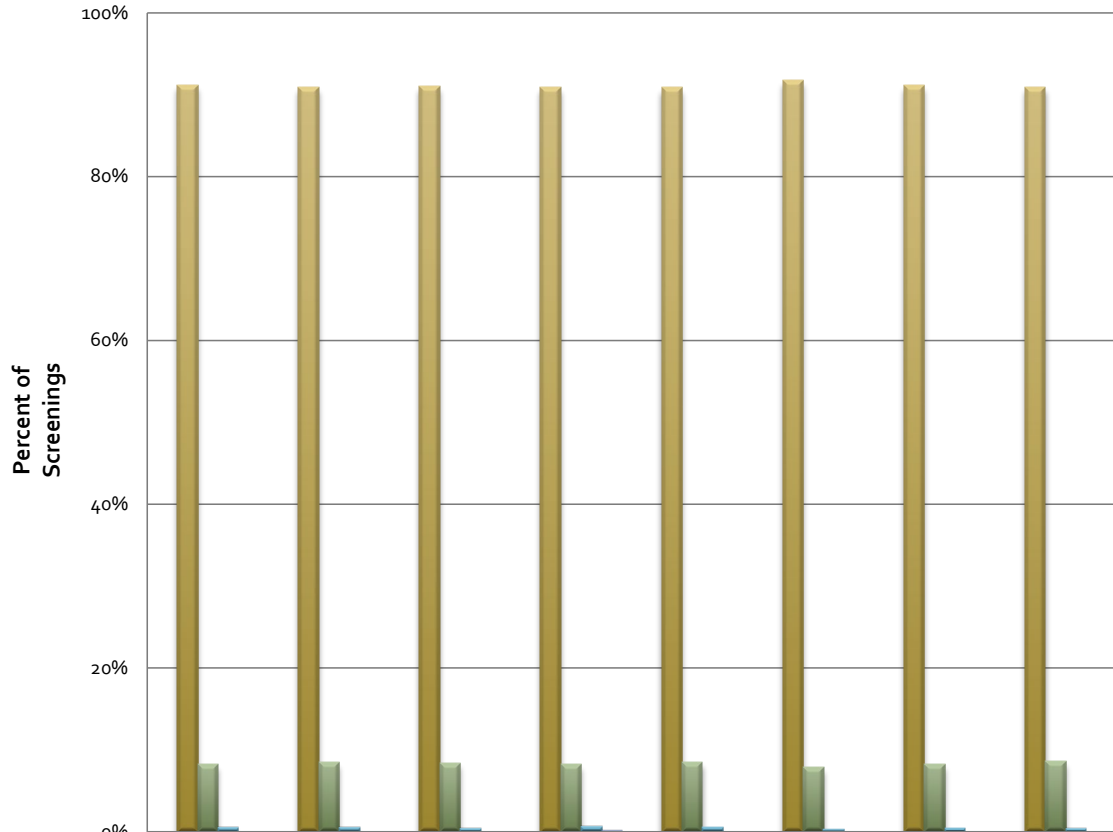
	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
Unduplicated Number of SATOP Consumers	7,901	7,825	7,033	6,168	7,623	8,013	7,296	6,271
SATOP Screened	4,643	4,275	3,802	3,531	4,489	4,438	3,967	3,598
Education Pgm	1,732	1,833	1,518	991	1,641	1,911	1,669	1,001
Weekend Intervention Pgm	1,011	854	835	747	920	931	1,037	734
Clinical Treatment Pgm	2,291	2,398	2,333	2,201	2,247	2,327	2,236	2,001

NOTES: The number screened will not equal the sum of the programs due to consumers having up to 6 months to enroll in the assigned program. Consumers may also decide to complete a comparable program that is more intensive than the one recommended by the screening. Clinical treatment programs include Clinical Intervention Program, Youth Clinical Intervention Program, and the Serious & Repeat Offender Program.

**Significance:** The data show a trend of increased screenings in the Jan-Mar quarter which is due in part to the increased number of DWIs cited over the holidays. DWI arrests have declined since 2009 (see note).



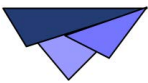
## Substance Awareness Traffic Offenders Program (SATOP) Consumers Screened - Range of Previous SATOP Screenings Within Past 5 Years



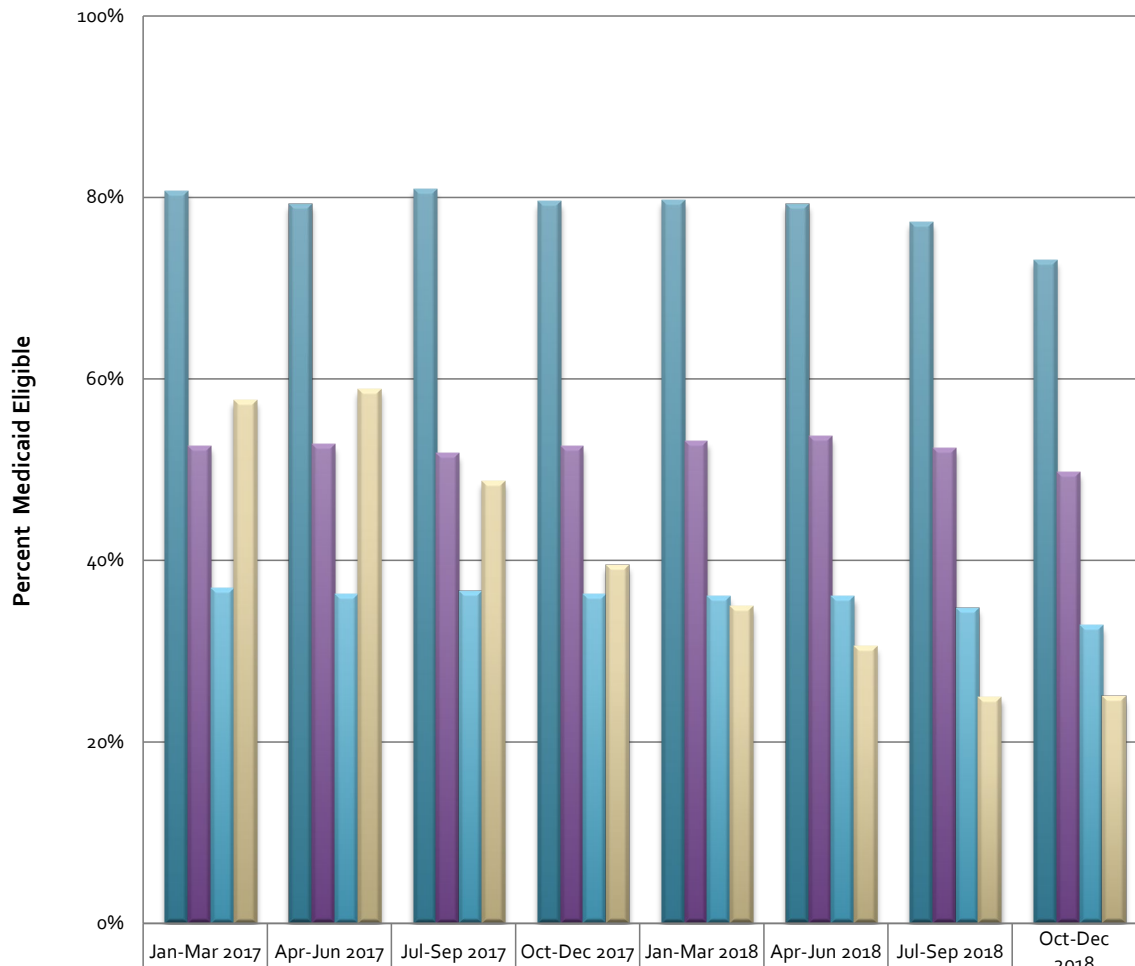
	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
SATOP Screened or Assigned to Comparable Pgm	5,433	5,045	4,440	4,152	5,262	5,298	4,625	4,396
0 Prior Screening	4,953	4,588	4,045	3,778	4,783	4,862	4,219	3,999
0 Prior Screening Pct	91.2%	90.9%	91.1%	91.0%	90.9%	91.8%	91.2%	91.0%
1 Prior Screening	447	427	375	341	450	417	384	378
1 Prior Screening Pct	8.2%	8.5%	8.4%	8.2%	8.6%	7.9%	8.3%	8.6%
2 Prior Screenings	32	29	19	26	28	16	21	18
2 Prior Screenings Pct	0.6%	0.6%	0.4%	0.6%	0.5%	0.3%	0.5%	0.4%
3+ Prior Screenings	1	1	1	7	1	3	1	1
3+ Prior Screenings Pct	0.0%	0.0%	0.0%	0.2%	0.0%	0.1%	0.0%	0.0%

NOTE: All data reflects number of previous screenings within the past 5 years of consumers' last SATOP screening within the reported quarter.

**Significance:** The majority of consumers who receive a SATOP screening have never had a SATOP screening. The majority of the consumers with at least 1 prior SATOP screening have had only 1 prior screening.



## Medicaid Eligibility for Individuals Served in CSTAR Programs

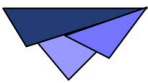


	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
CSTAR Adolescent Medicaid Eligible	953	890	802	813	839	804	687	683
% CSTAR Adolescent Medicaid Eligible	80.8%	79.3%	80.9%	79.5%	79.8%	79.3%	77.3%	73.1%
CSTAR W&C Medicaid Eligible	1,334	1,389	1,324	1,305	1,320	1,365	1,356	1,197
% CSTAR W&C Medicaid Eligible	52.6%	52.8%	51.8%	52.6%	53.2%	53.7%	52.3%	49.7%
CSTAR Gen Adult Medicaid Eligible	4,098	4,174	4,018	3,820	3,934	4,060	3,853	3,550
% CSTAR Gen Adult Medicaid Eligible	36.9%	36.3%	36.7%	36.3%	36.1%	36.0%	34.8%	32.8%
Opioid Medicaid Eligible	775	820	819	861	881	837	904	850
% Opioid Medicaid Eligible	57.7%	58.9%	48.8%	39.5%	34.9%	30.6%	25.0%	25.0%

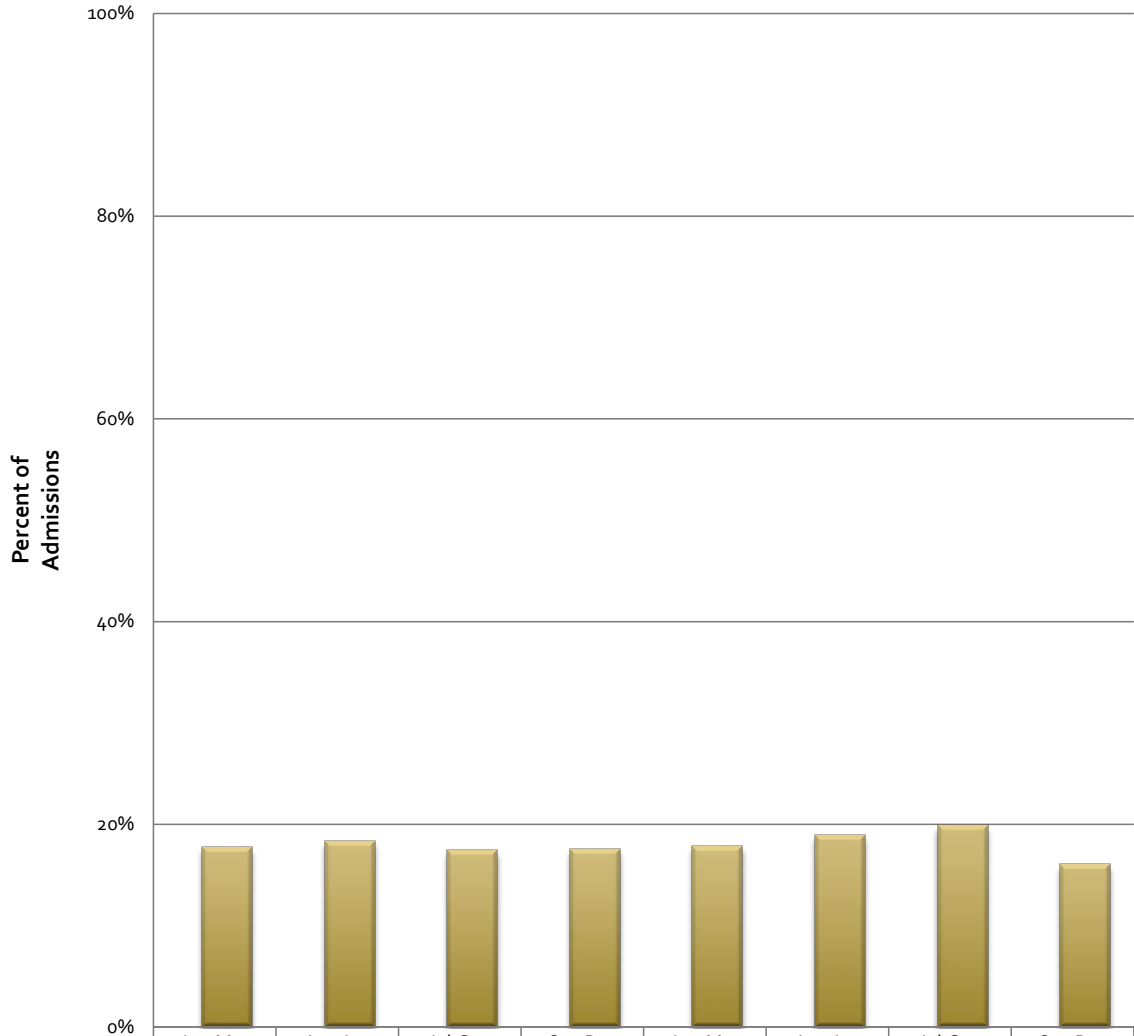
NOTE: CSTAR Detox is excluded.

**Significance:** Medicaid-eligible consumers comprise between 35 - 80% of the CSTAR consumer populations. The proportion is higher in the Adolescent program and lower in the General Adult program.





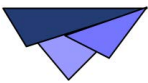
## Medicaid Eligibility for Individuals Served in Non-CSTAR Substance Use Programs



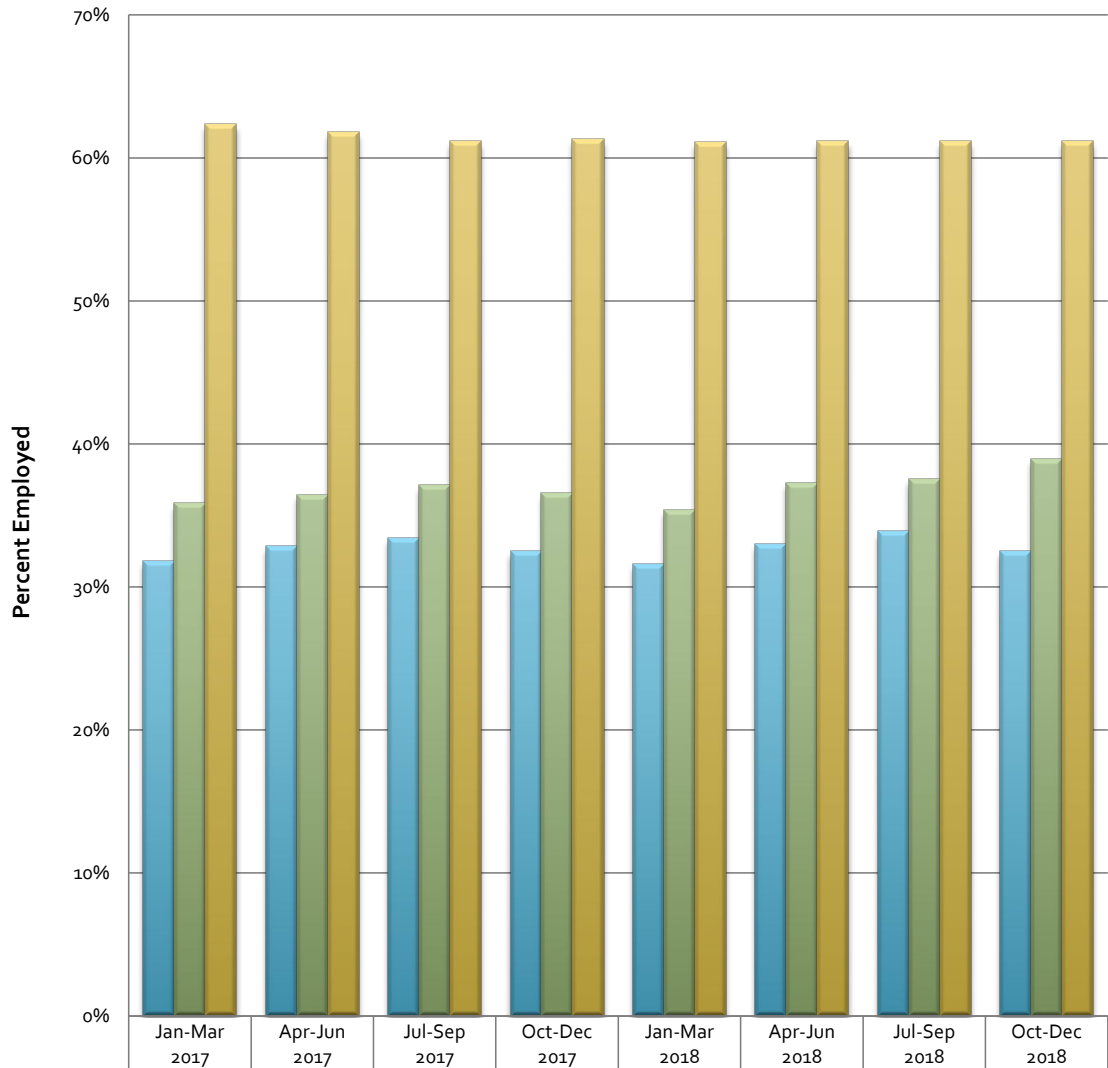
	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
Non-CSTAR Medicaid Eligible	331	354	249	188	189	201	178	131
% Non-CSTAR Medicaid Eligible	17.8%	18.3%	17.4%	17.6%	17.9%	19.0%	19.9%	16.1%

NOTE: Non-CSTAR programs include Primary Recovery Plus, Enhanced Primary Recovery Plus, Corrections Primary Recovery Plus, DOC Free & Clean Plus, DOC Partnership for Community Restoration, Clinical Intervention Program (Adult and Youth), Serious & Repeat Offender Program and General Treatment.

**Significance:** The number of consumers served in non-CSTAR programs has declined in recent years. Since April 2009, 24 Primary Recovery Plus contracts have been converted to CSTAR to allow for Medicaid reimbursement.



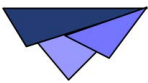
## Employment of Adult Population in Substance Use Treatment



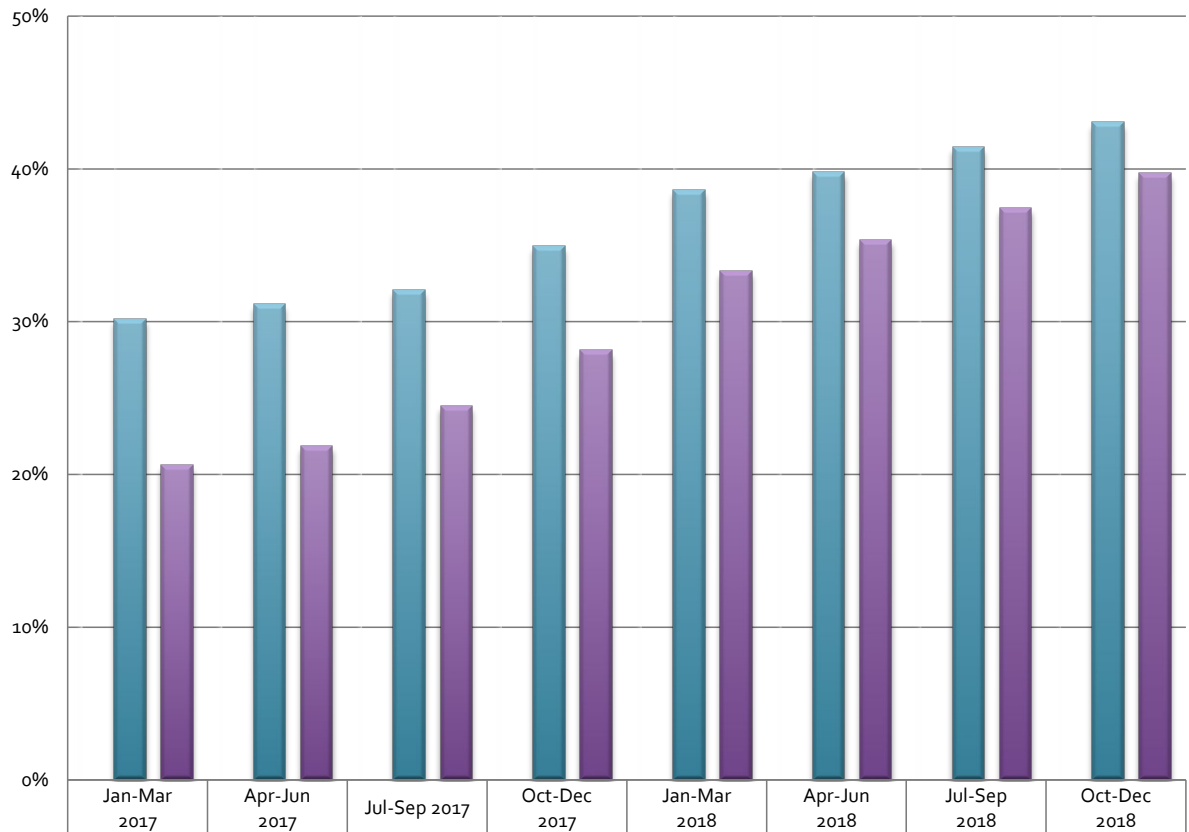
	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
Admission Employment of ADA Adult Population	31.83%	32.86%	33.44%	32.52%	31.62%	33.00%	33.88%	32.52%
Discharge Employment of ADA Adult Population	35.83%	36.44%	37.09%	36.58%	35.40%	37.25%	37.55%	38.97%
Employment of MO Adult Population	62.37%	61.83%	61.20%	61.30%	61.10%	61.20%	61.20%	61.20%

Note: Adolescent programs, detox, and codependents are excluded from the employment calculations.

**Significance:** Employment of the adult substance use treatment population measures engagement in work and accounts for those not actively seeking work - unlike the "Employment Rate" which is based only on the labor force. The measure is compared against the employment of the civilian noninstitutional population (age 16-64) in Missouri (data source: U.S. Bureau of Labor Statistics). Employment has a powerful therapeutic impact for individuals in recovery and is to be included in the treatment and recovery plan.



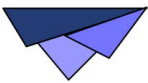
## Consumers Receiving Medication Therapy



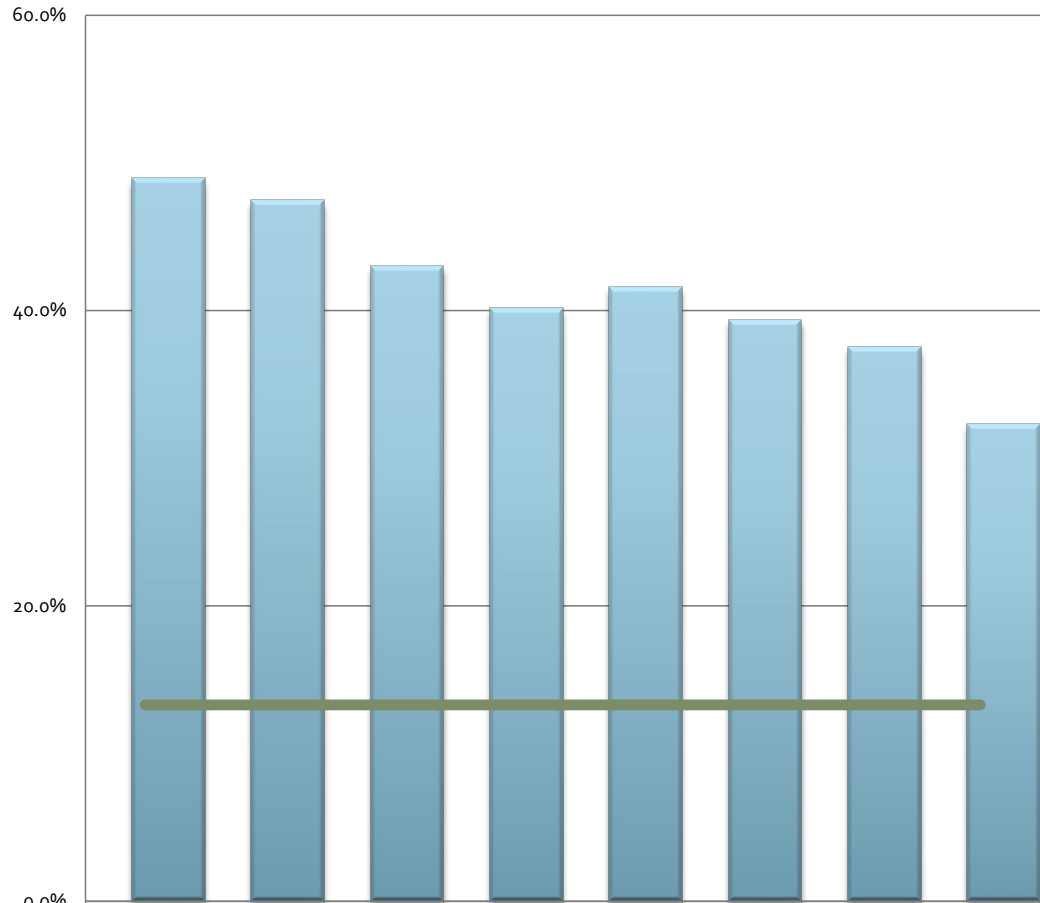
	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
Including CSTAR Opioid: # Adult Opioid/Alcohol-Addicted Consumers	11,423	11,727	11,279	11,167	11,700	12,050	12,579	12,627
# Consumers Receiving Medication Therapy	3,448	3,650	3,620	3,899	4,515	4,793	5,215	5,435
<span style="color: teal;">■</span> % Consumers Receiving Medication Therapy	30.2%	31.1%	32.1%	34.9%	38.6%	39.8%	41.5%	43.0%
Excluding CSTAR Opioid: # Adult Opioid/Alcohol-Addicted Consumers	9,778	10,010	9,757	9,730	10,155	10,452	10,869	10,830
# Consumers Receiving Medication Therapy	2,015	2,189	2,390	2,735	3,380	3,692	4,070	4,299
<span style="color: purple;">■</span> % Consumers Receiving Medication Therapy	20.6%	21.9%	24.5%	28.1%	33.3%	35.3%	37.4%	39.7%

Note: Detox and SATOP treatment programs are excluded. Medications for addiction treatment include Vivitrol, acamprosate, buprenorphine, naltrexone, and Suboxone. Medicaid claims for direct billing from pharmacies for substance use treatment consumers are included. CIMOR only started tracking type of medication in January 2010.

**Significance: Medication therapy in combination with psychosocial counseling to support treatment and recovery from substance use disorders is a National Quality Forum recommendation.**



## Transition from Detox to Treatment

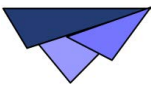


	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
# of Detox Discharges	1,651	1,675	1,574	1,480	1,522	1,405	1,451	1,343
# Transitioning from Detox to Tx	808	795	677	595	633	553	545	434
% Transitioning from Detox to Tx	48.9%	47.5%	43.0%	40.2%	41.6%	39.4%	37.6%	32.3%
U.S. % Transitioning from Detox to Tx	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%

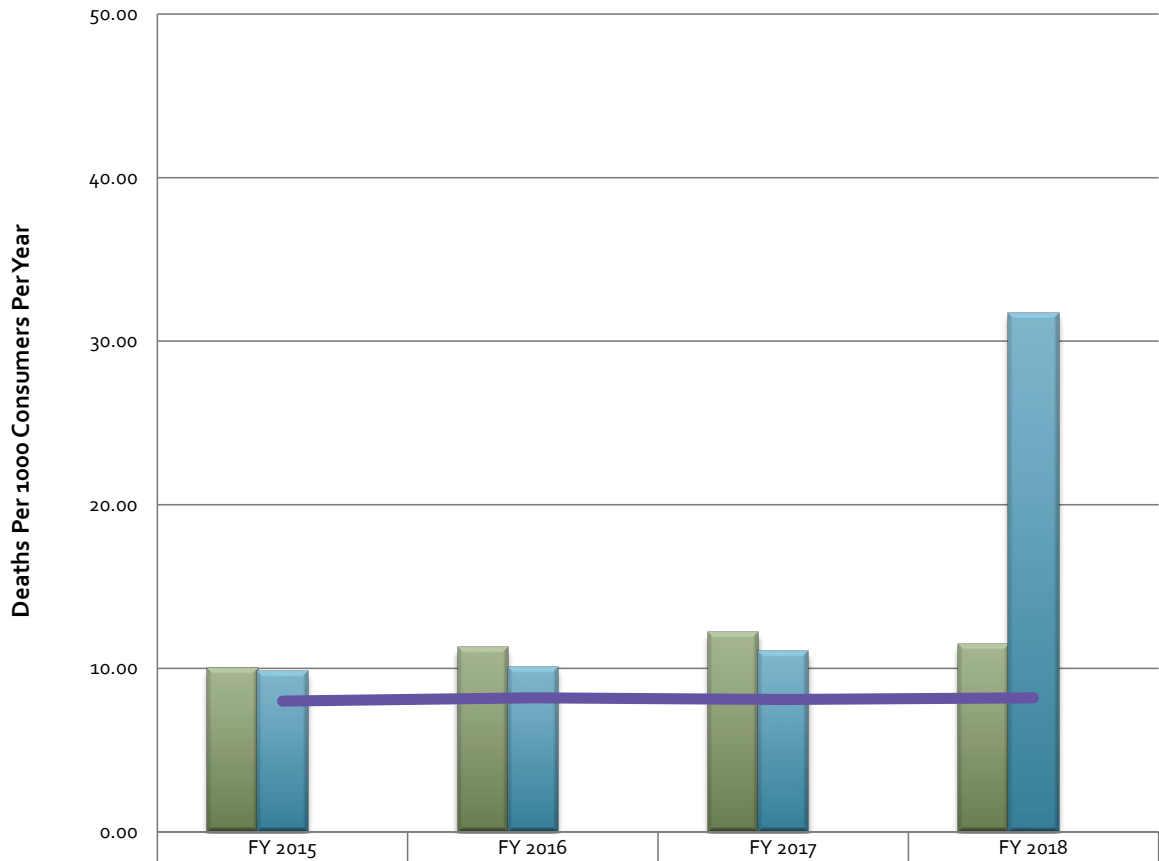
**CAUTION:** Data from July 2017 onward may be incomplete due to a delay in submission of encounters to CIMOR as the result of the CCBHC project.

Notes: A transition is recorded if any treatment service is provided within 5 days of the last day of detox. U.S. data for transition from the Treatment Episode Dataset - Discharges, 2013 (SAMHSA, 2016).

**Significance:** "Detox alone with no follow-up is not treatment" (NIDA). Transitioning from detox to treatment is key to reducing recidivism and ending the "revolving door" phenomenon.



## Substance Use Treatment Consumer Mortality Rates



	FY 2015	FY 2016	FY 2017	FY 2018
Community Deaths	151	166	189	205
Mortality Rate	9.99	11.32	12.19	11.48
Age Adjusted Mortality Rate	9.81	10.05	11.03	31.75
# Consumers	52,535	49,042	50,003	48,290
MO Vital Statistics Crude Mortality/1000	9.6	9.8	9.8	10.1
MO Vital Statistics Age Adj Mortality/1000	8.0	8.2	8.1	8.2
Average Age At Death	41.9	41.3	40.6	42.9

NOTE: Chart includes all substance use treatment consumers (residential and community primary consumers, compulsive gambling, collateral dependents, SATOP – except educational programs and screenings).

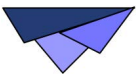
NOTE: The increase in the FY 2018 Age Adjusted Mortality Rate is the result of the death of the only consumer served in the 85+ age category. This consumer had been continuously served in a Methadone Clinic for 19 years.

**Significance:** Substance use treatment consumers have a crude mortality rate that is comparable to Missouri community mortality rate of 10.1 deaths per 1000 Missouri residents (Missouri Department of Health and Senior Services, Bureau of Vital Statistics, 2014). Age-adjusted rate, however, tends to be higher for substance use treatment consumers presumably due to their substance use. Average age of consumers served is

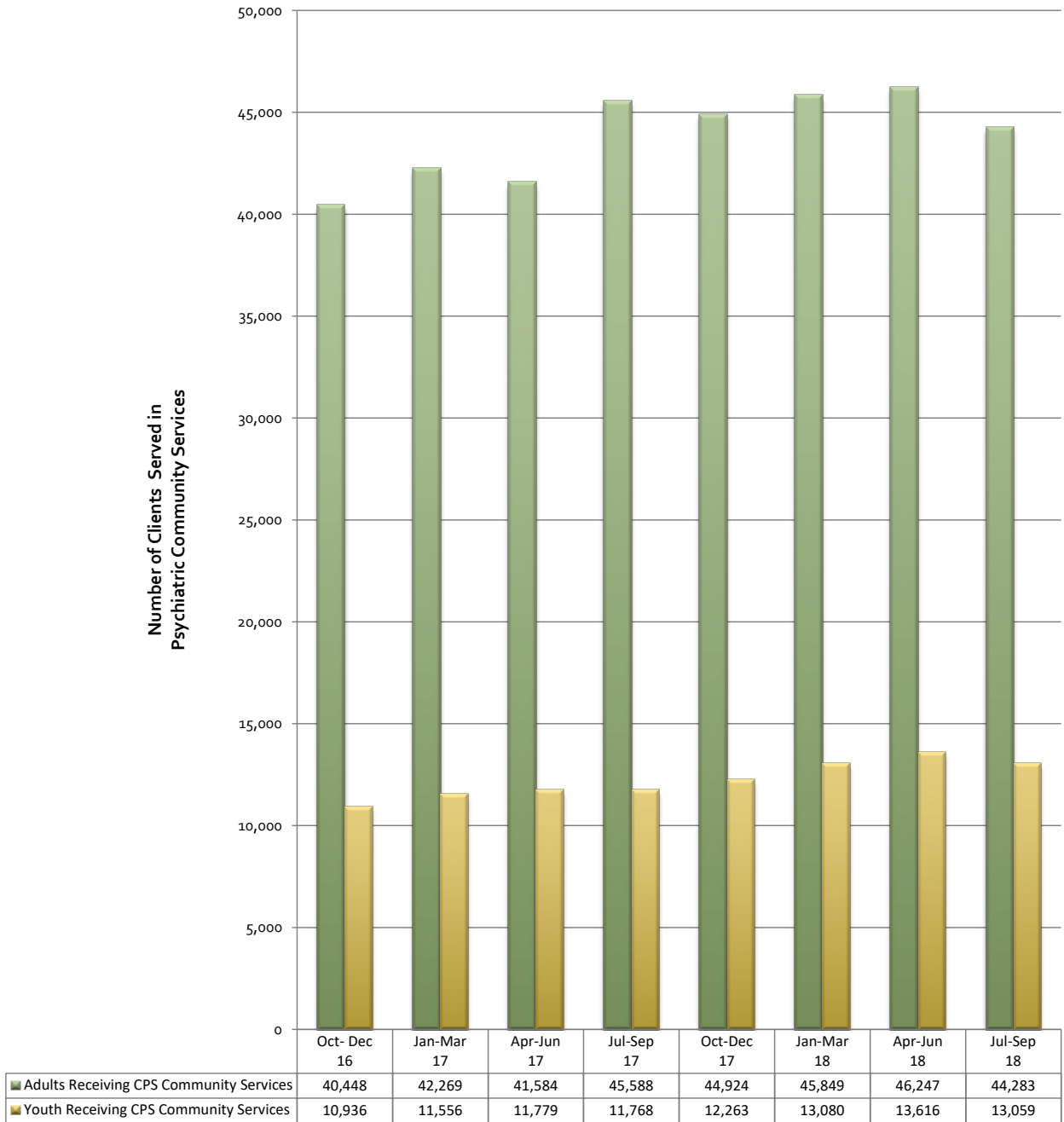


# Division of Behavioral Health

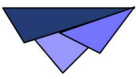
Comprehensive Psychiatric  
Services



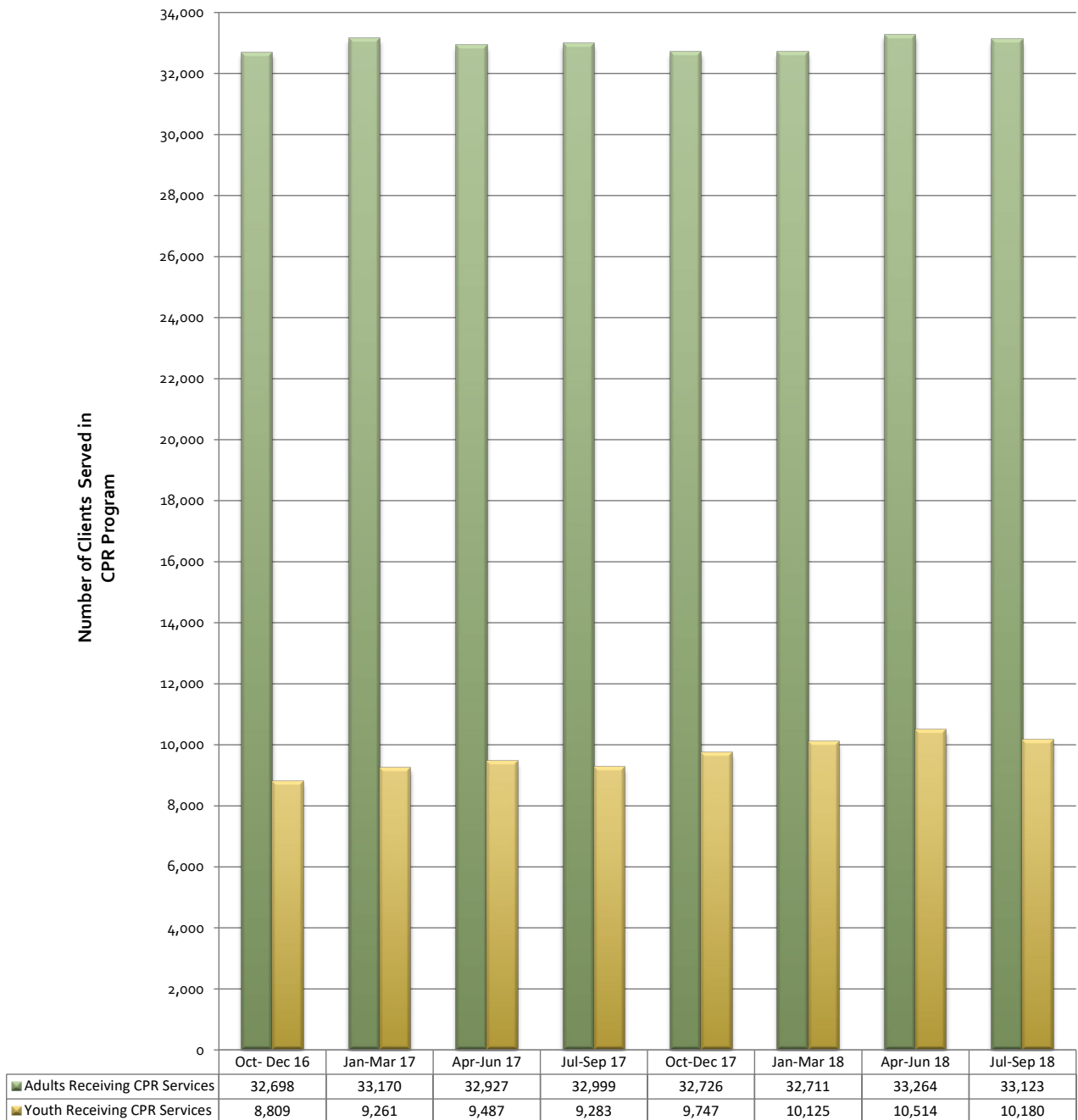
## Clients Receiving Psychiatric Community Services



**SIGNIFICANCE:** Note that the most recent quarter will always be undercounted due to lagging claims and therefore is not displayed. Numbers for 2 quarters back are displayed but subject to slight upward revision as lagging claims come in. The long term trend (over many years) has been one of slowly increasing numbers of Psych. Services community clients. This trend appears to have slowed but not quite halted. Note that this and subsequent graphs do not count clients treated "pro bono" by CMHCs, as those clients do not appear in our claims data or in CIMOR.

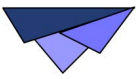


## Clients in the Community Psychiatric Rehabilitation Program

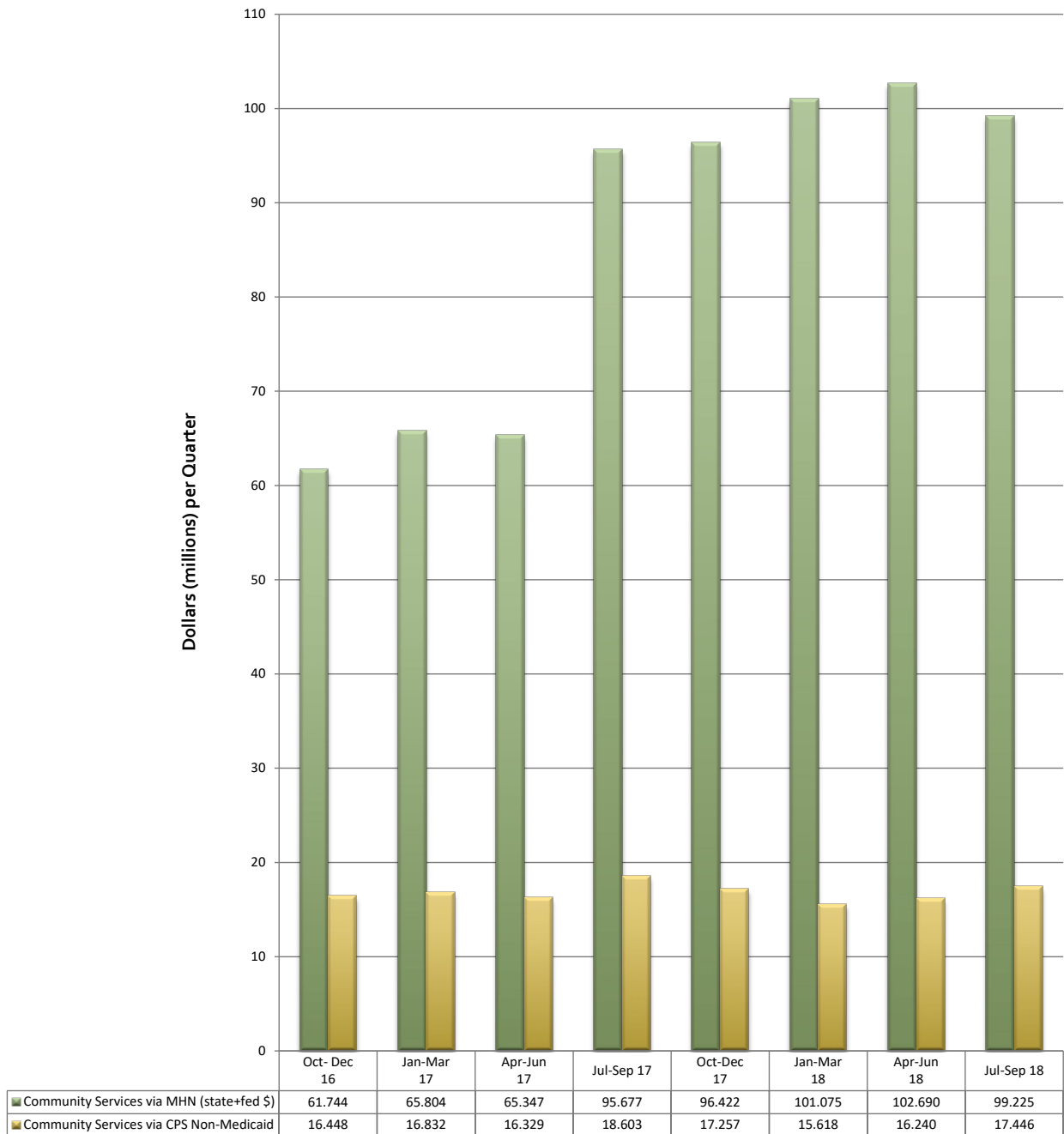


**SIGNIFICANCE:** The most recent quarter will always be undercounted due to lagging claims and therefore is not displayed. Adult and Youth CPR enrollment has somewhat stabilized after several years of steady growth, but Youth CPR was showing very gradual increases in the previous four quarters.

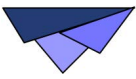




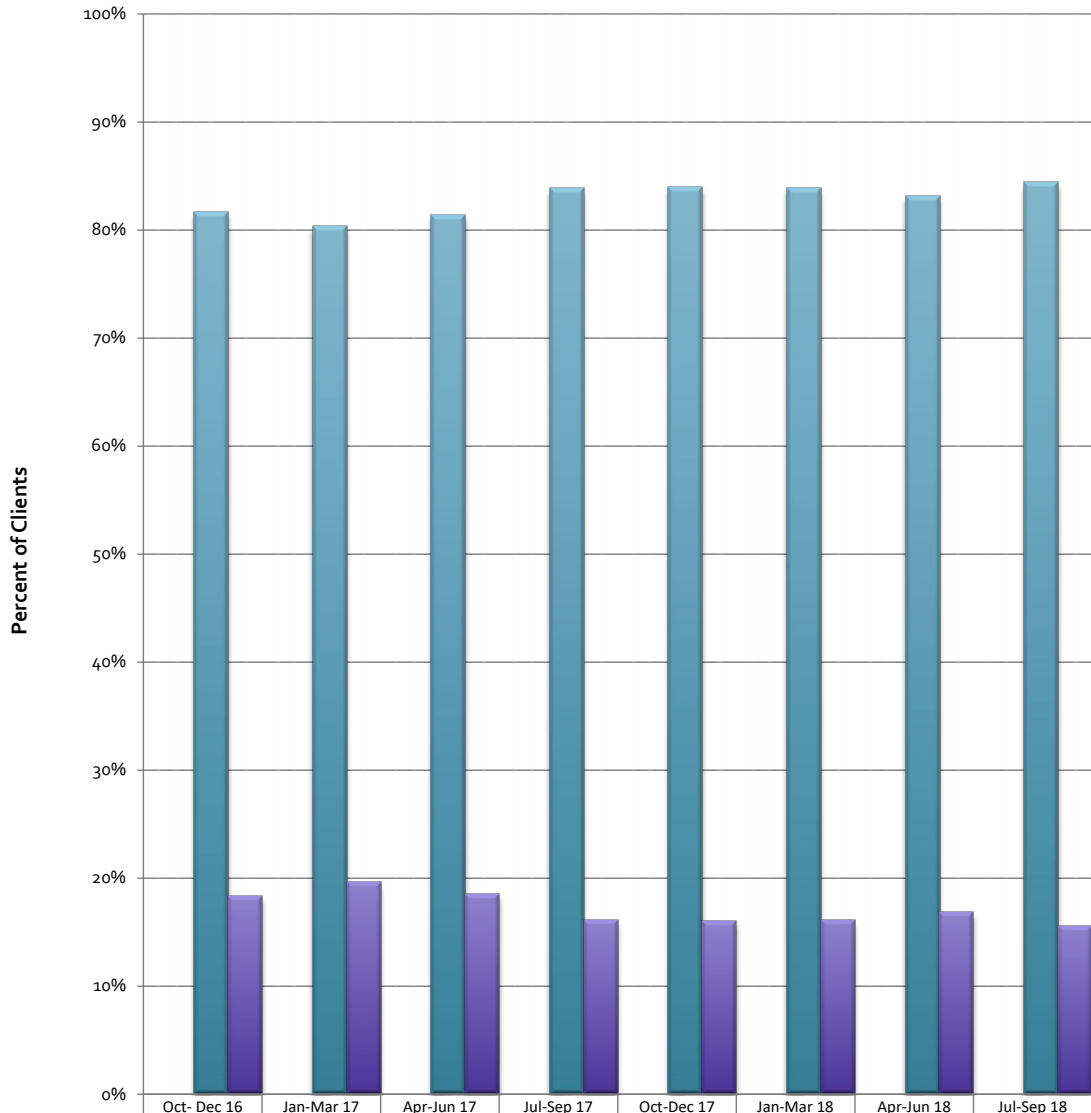
## Funding Sources for Psychiatric Services Community Clients



**SIGNIFICANCE:** The most recent quarter will always be undercounted due to lagging claims and therefore is not displayed. POS spending in the last quarter of the FY is routinely the peak of Non-Medicare spending for the year and so this should not be interpreted as a trend so much as part of the annual billing cycle. The most recent reported quarters include some DSS clinic option funding for CCBHC.

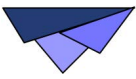


## Medicaid Eligibility of Psychiatric Services Community Clients

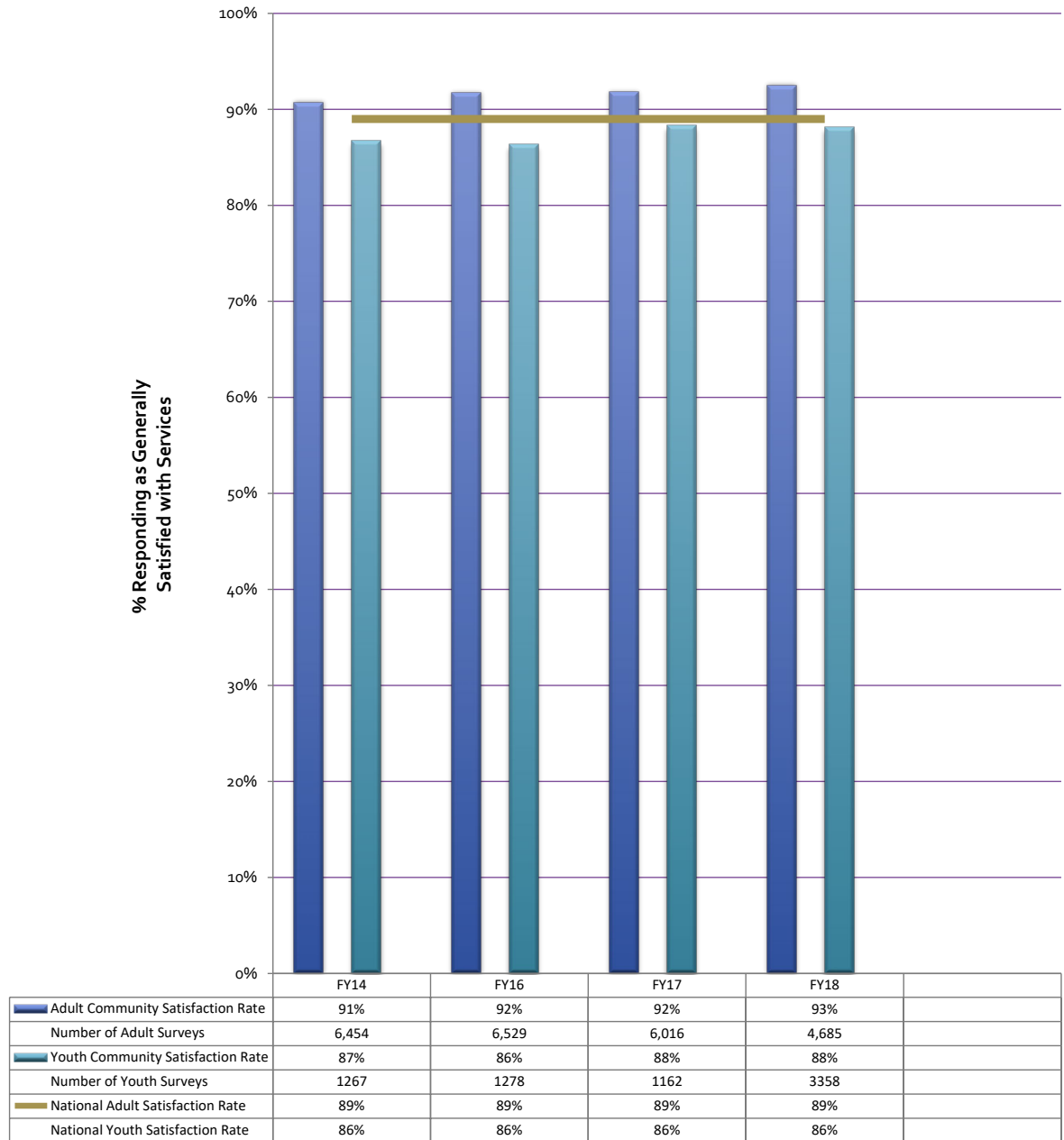


	Oct- Dec 16	Jan-Mar 17	Apr-Jun 17	Jul-Sep 17	Oct-Dec 17	Jan-Mar 18	Apr-Jun 18	Jul-Sep 18
CPS Facility Client Count	1,357	1,358	1,341	1,336	1,331	1,341	1,339	1,314
CPS Community Client Count	51,384	53,825	53,363	57,356	57,187	58,929	59,863	57,342
M.E. Clients -- All CPS Community	41,962	43,266	43,449	48,095	48,040	49,437	49,777	48,405
% M.E. -- All CPS Community	81.7%	80.4%	81.4%	83.9%	84.0%	83.9%	83.2%	84.4%
Not M.E. Clients -- All CPS Community	9,422	10,559	9,914	9,261	9,147	9,492	10,086	8,937
% Not M.E. -- All CPS Community	18.3%	19.6%	18.6%	16.1%	16.0%	16.1%	16.8%	15.6%

**SIGNIFICANCE:** The most recent quarter will always be undercounted due to lagging claims and is therefore not displayed. The proportion of Psych. Services community clients with Medicaid Eligibility appears to have stabilized in the low 80% range over the past two years.

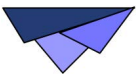


## Community Client General Satisfaction with Services

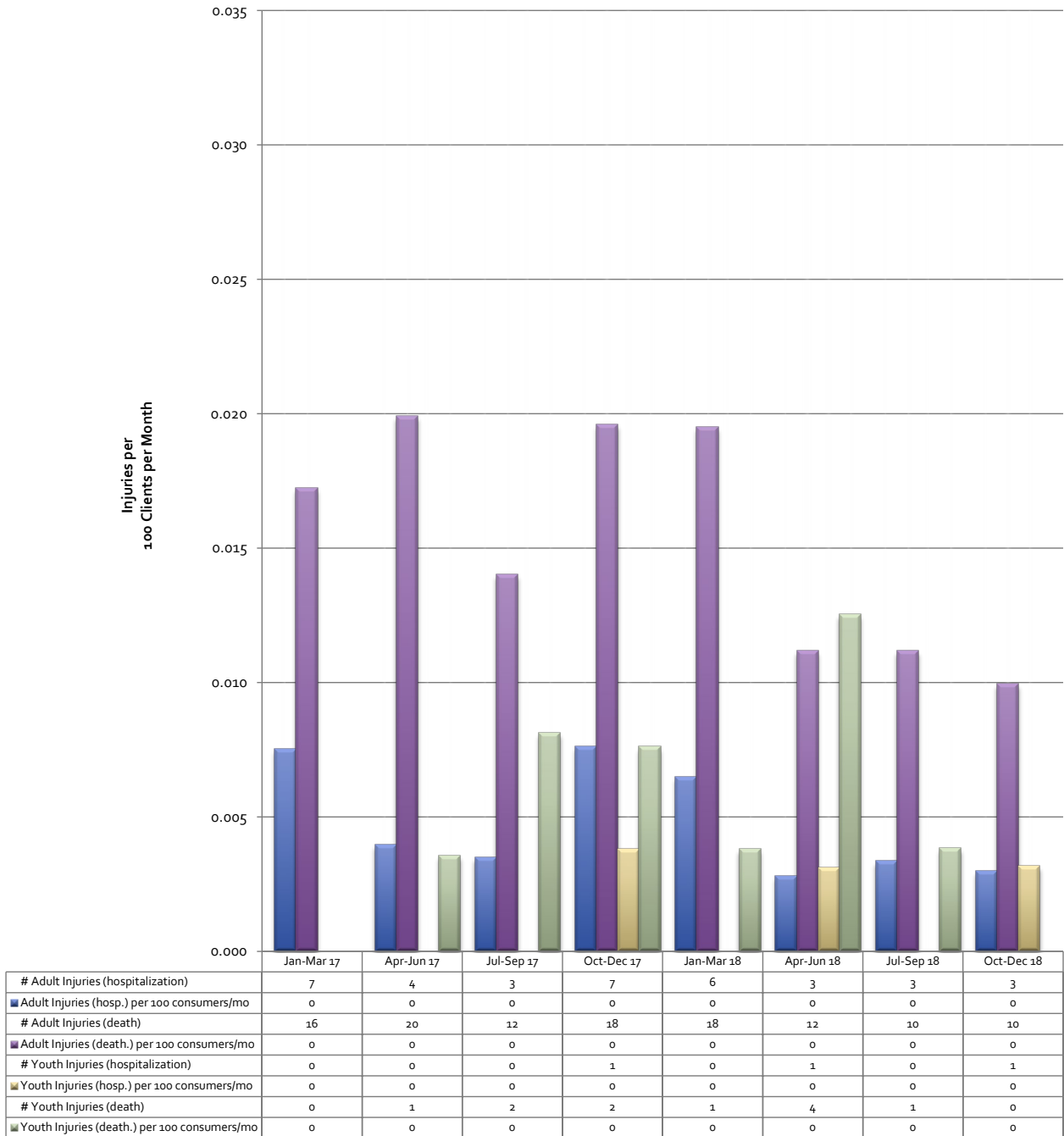


NOTE: Taken from the Adult and Youth Satisfaction Surveys using national standard MHSIP questions. *For FY18, these became annual surveys due to CCBHC reporting requirements.*

**SIGNIFICANCE:** Both adult clients and the families of youth in community psych. services report high rates of satisfaction with the services they receive in the community. These rates compare favorably to other satisfaction rates collected by state MH agencies around the country.



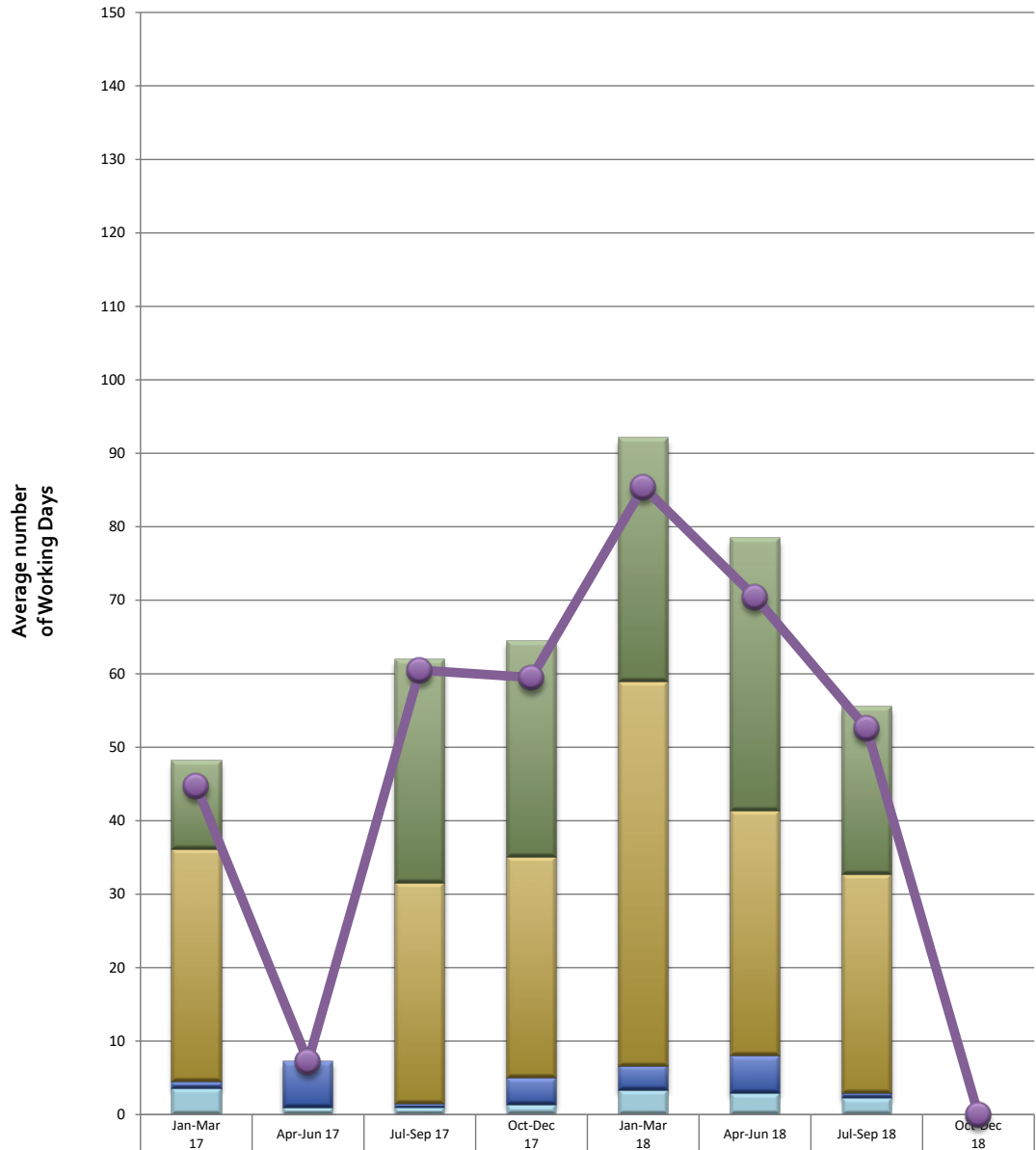
## Community Client Injuries



**SIGNIFICANCE:** There is a very low rate of serious injury to clients receiving community services, but these are individually significant events. The 10 adult injuries that resulted in deaths reported in the October-December '18 quarter are further categorized as: 3 suicides, 4 car accidents, 2 homicides, and 1 choking on food accident. All the events had a death determination performed by service provider with no indications of need for abuse/neglect investigation.

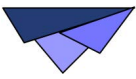


## Duration of Investigation Process for Community Services

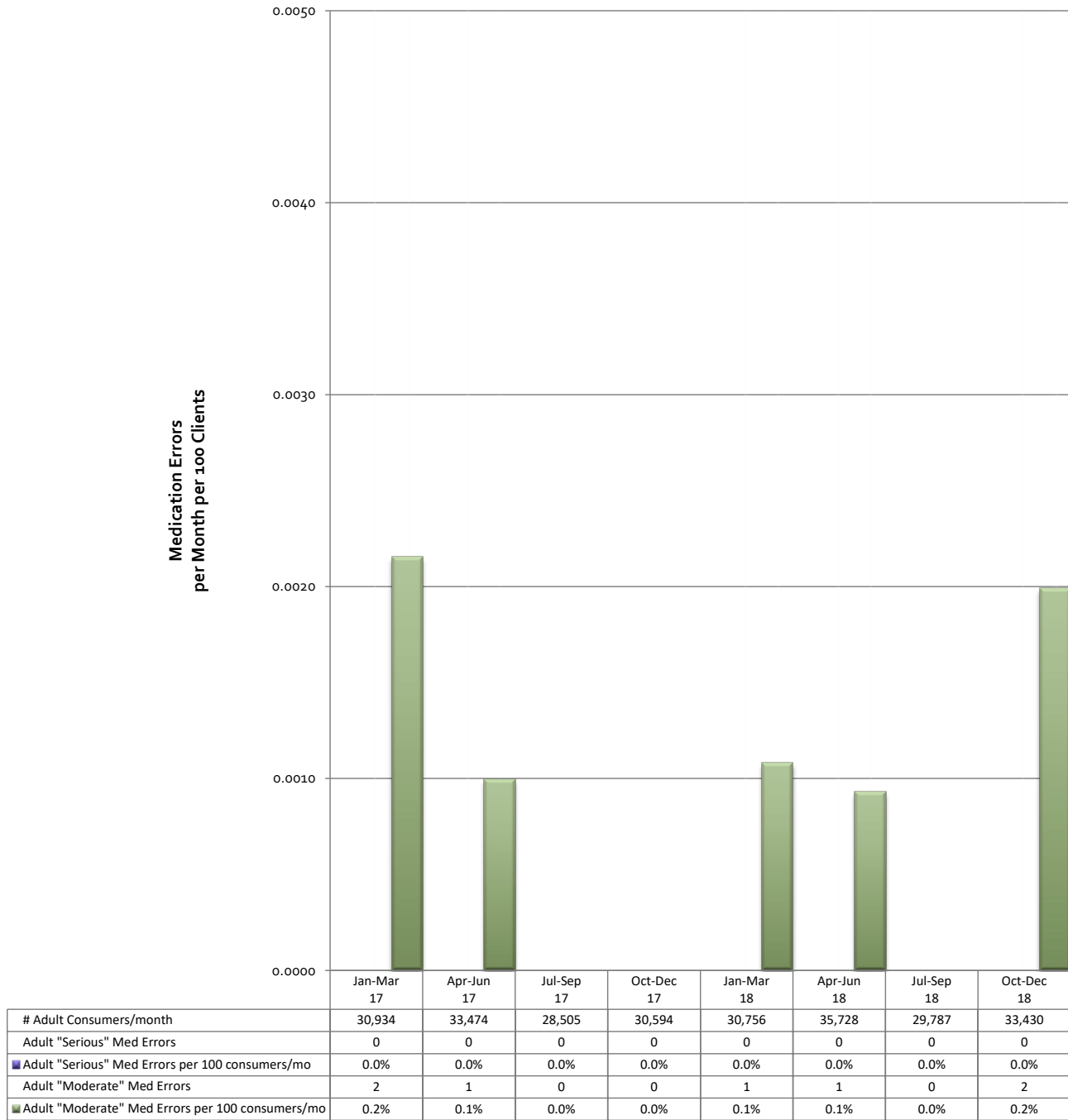


	Jan-Mar 17	Apr-Jun 17	Jul-Sep 17	Oct-Dec 17	Jan-Mar 18	Apr-Jun 18	Jul-Sep 18	Oct-Dec 18
CPS Comm. Investigation Event Count	13	0	2	4	4	9	4	0
CPS Comm.: Inv. Final Report to Final Determination	12.00	0.00	30.50	29.50	33.17	37.11	22.80	0.00
CPS Comm.: Inv. Request to Inv. Final Report	31.62	0.00	30.00	30.00	52.25	33.33	29.75	0.00
CPS Comm.: Event Report to Inv. Request	0.92	6.33	0.50	3.67	3.33	5.13	0.75	0.00
CPSComm.: Event Discovery to Event Report	3.62	0.90	1.00	1.33	3.33	2.88	2.25	0.00
CPS Comm.: "Typical" Inv Total Time	44.69	7.22	60.50	59.50	85.42	70.44	52.55	0.00

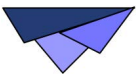
**NOTE:** Timelines are divided into 4 distinct stages of the investigation -- the bars show the average duration (in working days) for all final determinations made in each quarter, whereas the line superimposes the overall average duration of typical cases as defined by the 90% probability distribution of the times for each stage of the investigation. This shows both SCL and CMHC cases. The October-December '16 quarter reflects one event where investigation took much longer than usual (over 300 days) due to waiting on DNA results.



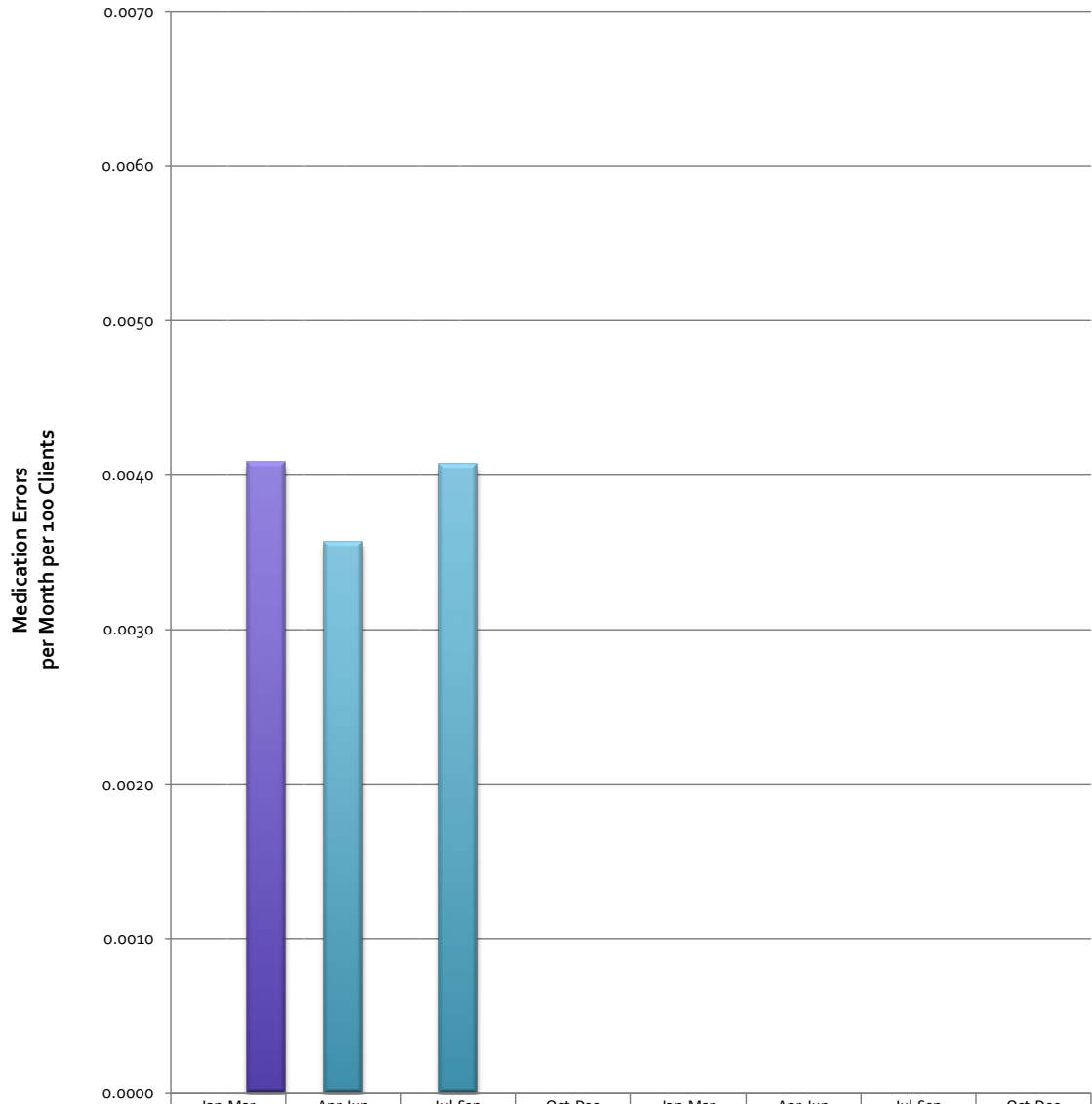
## Adult Community Medication Errors



NOTE: "Moderate" medication errors are those resulting in the need for treatment and/or interventions beyond monitoring and observation. "Serious" medication errors are those with life threatening and/or permanent adverse consequences.

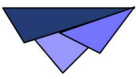


## Youth Community Medication Errors

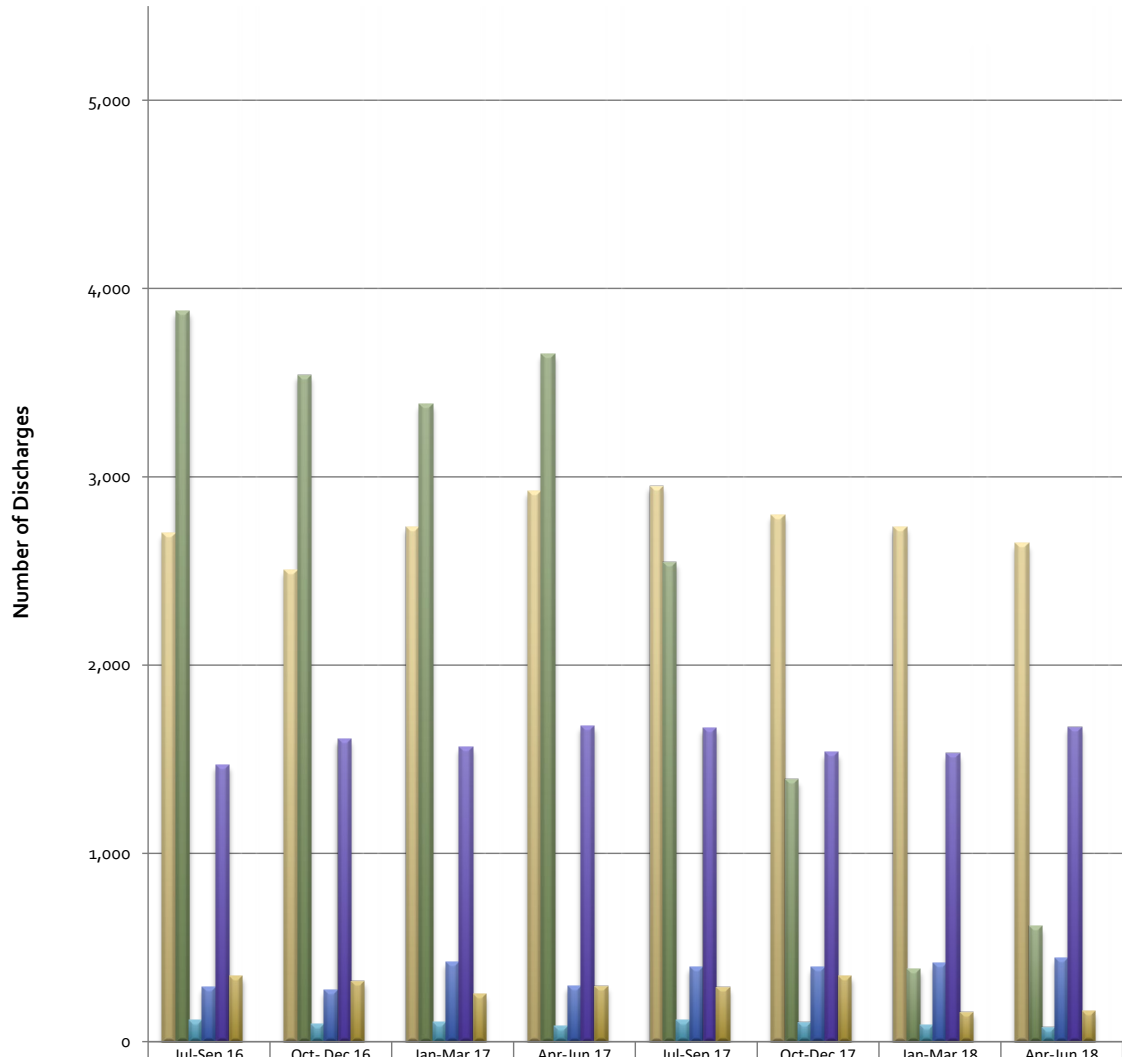


	Jan-Mar 17	Apr-Jun 17	Jul-Sep 17	Oct-Dec 17	Jan-Mar 18	Apr-Jun 18	Jul-Sep 18	Oct-Dec 18
# Youth Consumers/month	8,156	9,340	8,186	8,756	8,748	10,638	8,662	10,494
Youth "Moderate" Med Errors	0	1	1	0	0	0	0	0
Youth "Moderate" Med Errors per 100 consumers/mo	0.0%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Youth "Serious" Med Errors	1	0	0	0	0	0	0	0
Youth "Serious" Med Errors per 100 consumers/mo	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

NOTE: "Moderate" medication errors are those resulting in the need for treatment and/or interventions beyond monitoring and observation. "Serious" medication errors are those with life threatening and/or permanent adverse consequences.



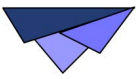
## Community Psychiatric Service Discharges



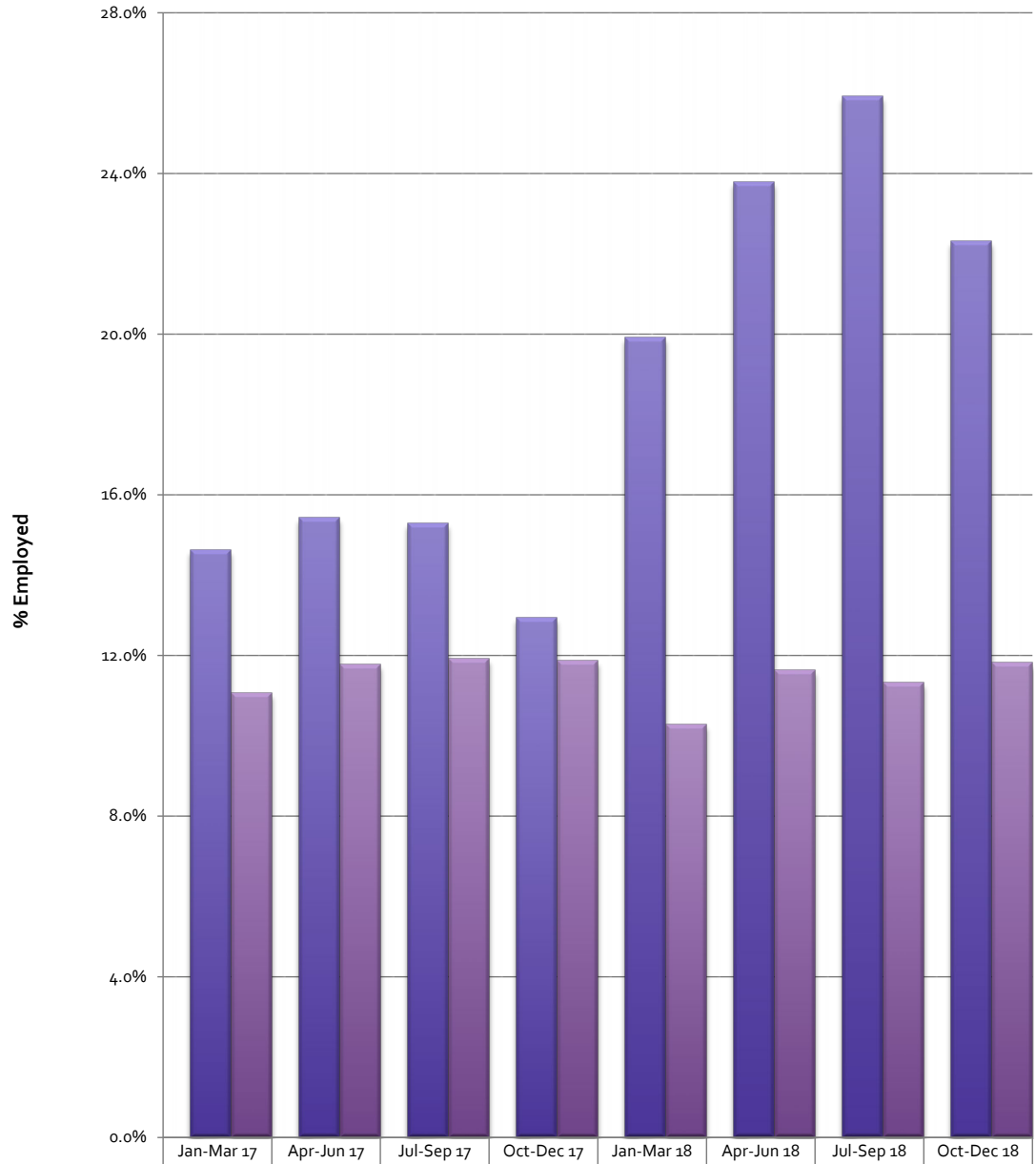
	Jul-Sep 16	Oct- Dec 16	Jan-Mar 17	Apr-Jun 17	Jul-Sep 17	Oct-Dec 17	Jan-Mar 18	Apr-Jun 18
Other Discharges	2,700	2,503	2,733	2,926	2,952	2,798	2,733	2,645
Admin. Discharge >24 hrs	3880	3538	3387	3652	2548	1392	384	611
Law Enforcement Initiated	112	94	102	85	112	103	89	76
Agency Initiated	289	272	421	296	397	393	415	445
Client Initiated	1,471	1,607	1,567	1,676	1,666	1,536	1,531	1,671
Admin. Discharge <24 hrs	347	321	254	297	290	351	158	162
CPS Community -- Total Discharges	8,799	8,335	8,464	8,932	7,965	6,573	5,310	5,610

**NOTE:** Due to complications resulting from the auto-discharge process in CIMOR, this data will always lag by 2 full quarters. Law enforcement initiated = incarcerated with or without satisfactory treatment progress; Agency initiated includes consumer would not comply plus treatment viewed as ineffective by therapist; Client initiated includes AMA, consumer dropped out, and treatment viewed as ineffective by consumer.; Admin. Discharge is system discharged due to inactivity for 6 months. Administrative Discharge < 24 hrs are clients who either did not receive services beyond initial screening or were transferred into non Behavioral Health sponsored services after initial screening.

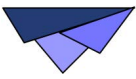




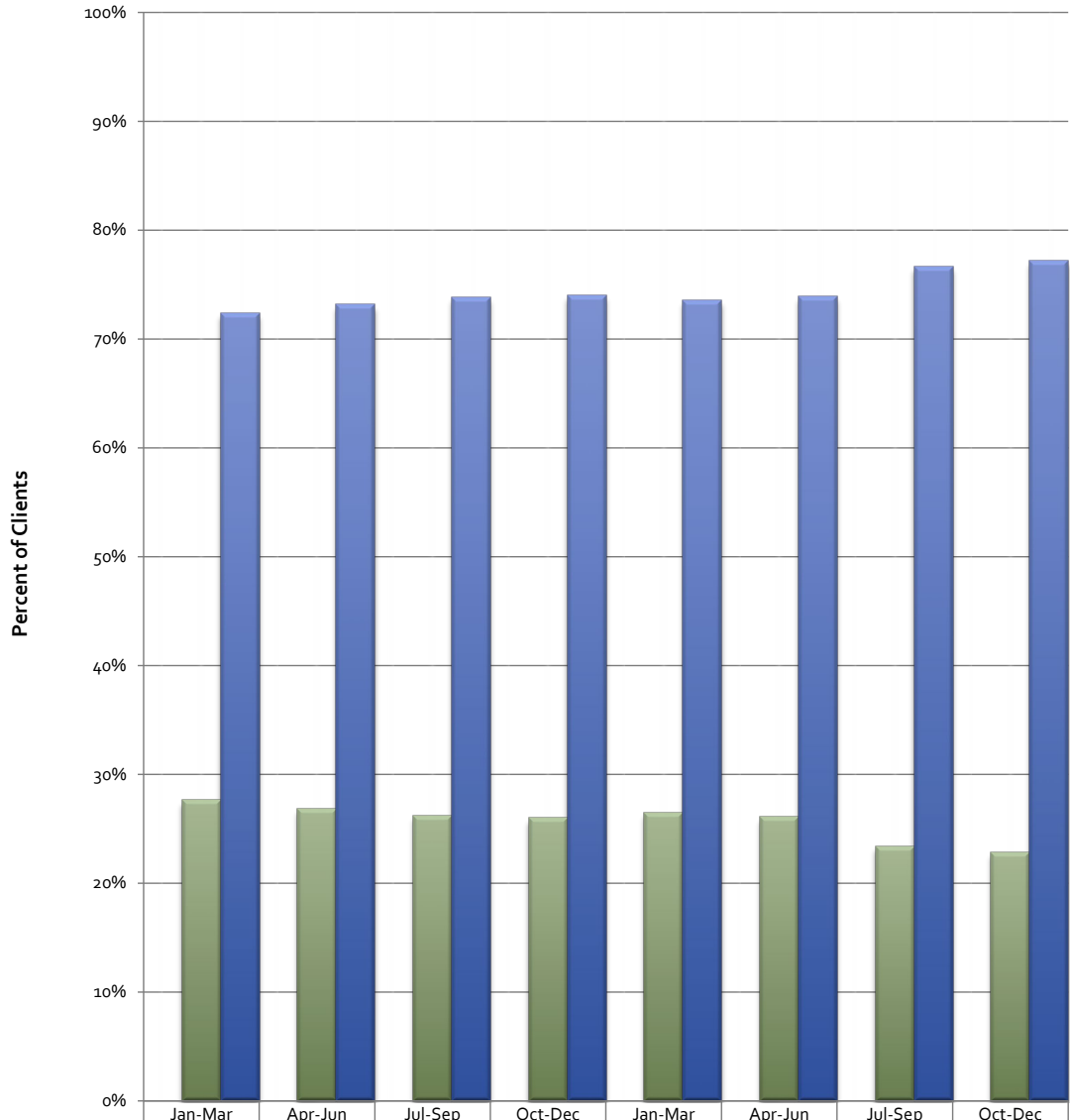
## Community Adults -- Employment



**NOTE:** This data is taken from the "CPS Status Report" and is thus an estimate taken from a large sample of clients each quarter. This graph shows consistently lower employment rates at annual re-assessment, probably due to recovering clients being more likely to become employed but also less likely to remain in services for the annual reassessment.

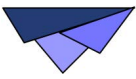


## Medicaid Eligibility of Psychiatric Facility Clients

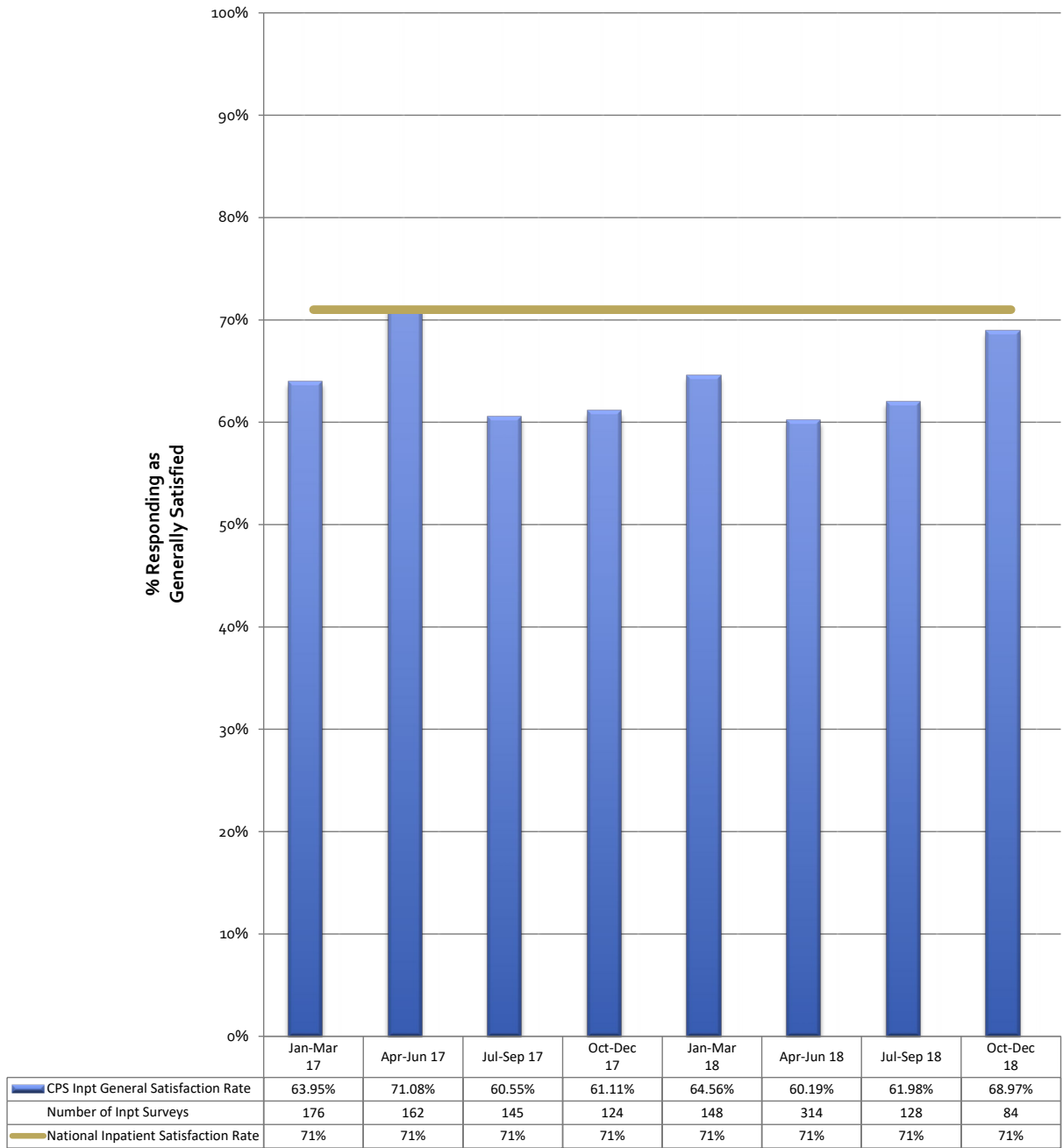


CPS Facility Client Count	1,358	1,341	1,336	1,331	1,341	1,339	1,314	1,323
M.E. Clients - CPS State Facilities	375	360	350	346	355	349	307	302
% M.E. -- CPS State Facility Clients	27.6%	26.8%	26.2%	26.0%	26.5%	26.1%	23.4%	22.8%
Not M.E. Clients - CPS State Facilities	983	981	986	985	986	990	1,007	1,021
% Not M.E. -- CPS State Facilities	72.4%	73.2%	73.8%	74.0%	73.5%	73.9%	76.6%	77.2%

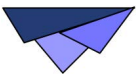
**SIGNIFICANCE:** The medicaid Eligibility rate for state facility clients dropped with the transfer of acute bed capacity to private hospitals. Once discharged however, the proportion of facility clients who then become Medicaid eligible increases to around the 80% rate of other community services clients.



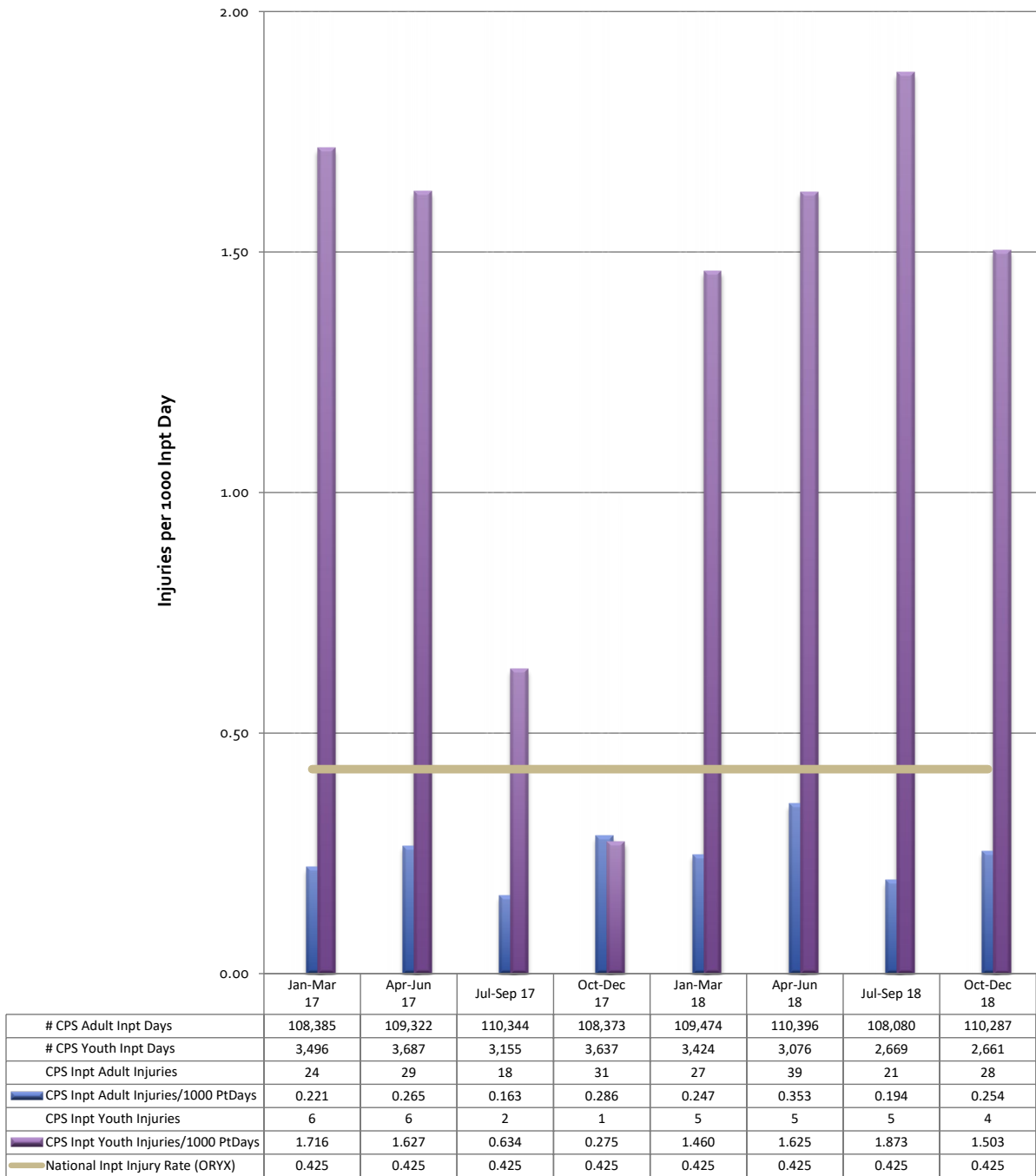
## Inpatient Satisfaction



NOTE: Taken from the CPS Inpatient MHSIP survey -- average of all 5 domains.  
**SIGNIFICANCE:** No overall trend but the general inpatient satisfaction rate compares well to similar client populations in other states using the same standardized survey instrument.



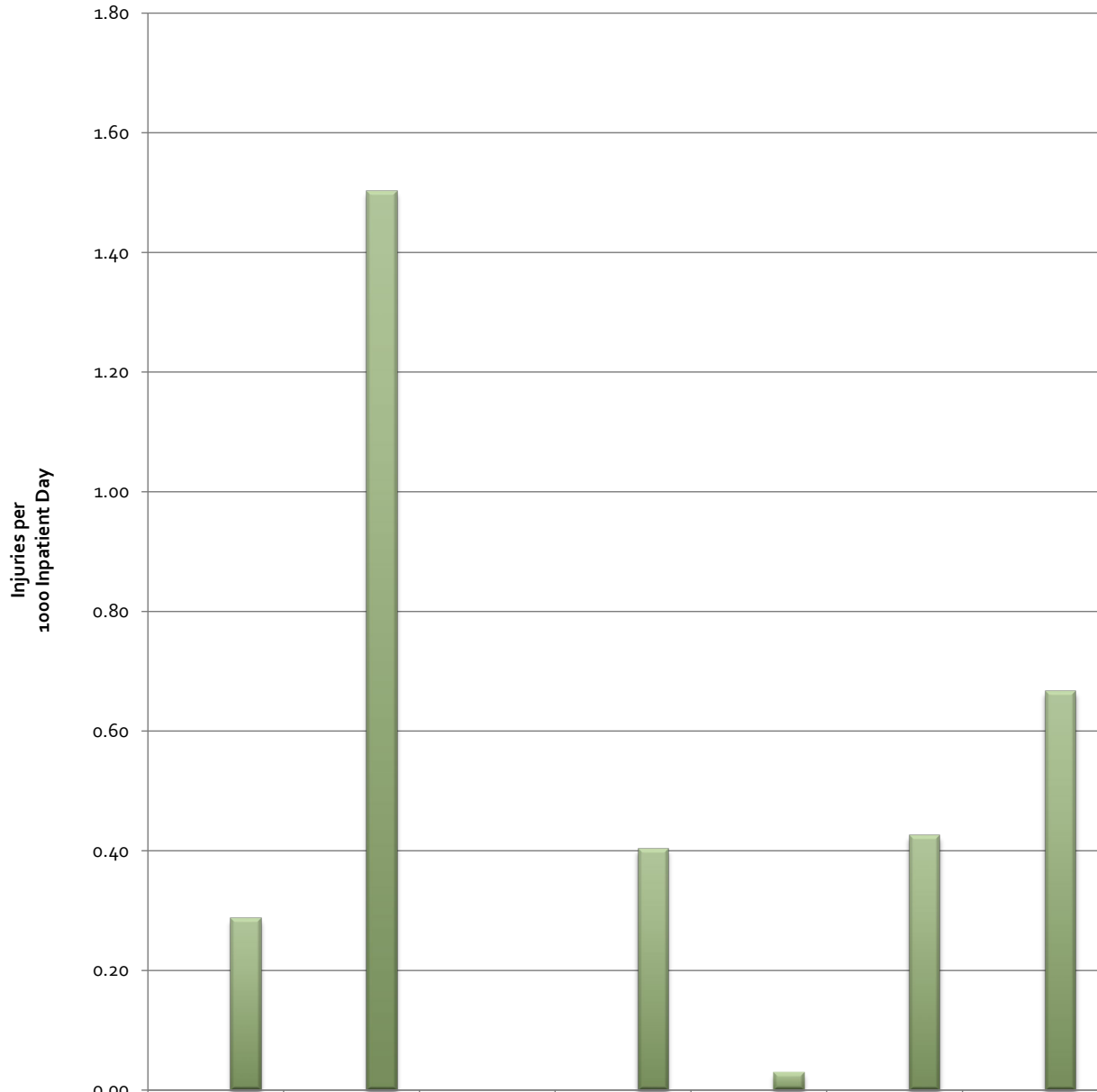
## Inpatient Client Injuries



NOTE: "Injuries" for Inpatient clients include those medical intervention or more. PtDays is a standard way to adjust for facility size on inpatient metrics for measures that apply to both acute and long term facilities - if we were to simply count clients this would result in disproportionately high client counts in acute facilities due to relatively rapid turnover and short length of stays. Also, using this definition allows us to benchmark to the NRI/ORYX rate of 0.425 injuries per 1000 patient days.

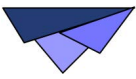


### Inpatient Client Injuries by Facility

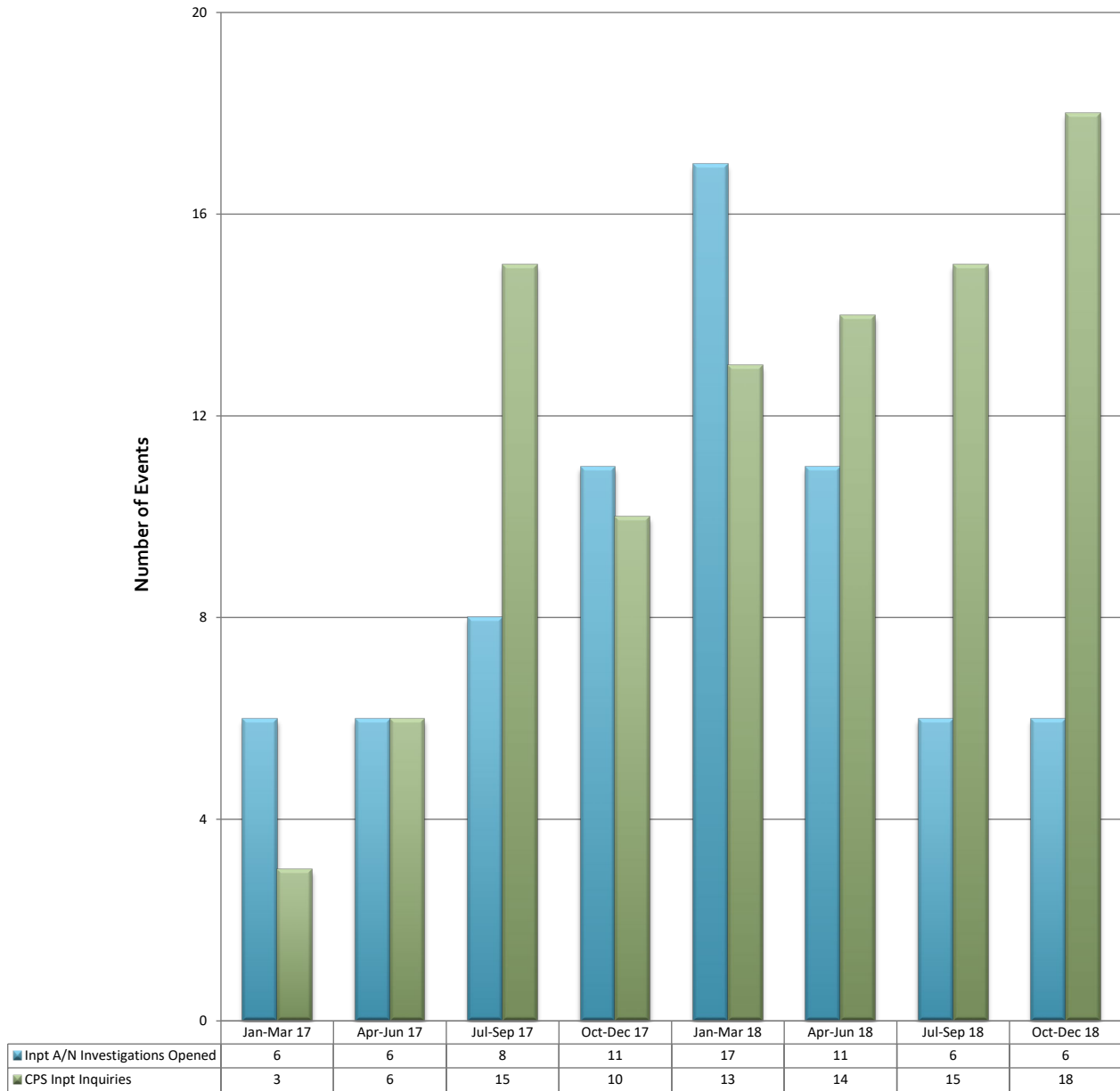


	FSH	HCPH	MPC	NMPRC	SMMHC	SLPRC	CBM
# Injuries	11	4	0	4	1	7	5
Inpatient Days	38,325	2,661	4,585	9,928	33,497	16,453	7,499
Injuries/ 1000 Pt-Days	0.29	1.50	0.00	0.40	0.03	0.43	0.67

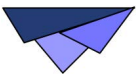
**SIGNIFICANCE:** This chart is looking at the most recent quarter's rate of client injuries per facility and adjusting that metric for the size (inpatient days) of the facility. Second quarter of FY19 shows a higher injury rate for Hawthorn Children's Psychiatric Hospital. Perhaps contrary to expectations, the rate of injuries is often low at our highest security facility. In order the facilities are: Fulton, Hawthorn, St Louis MPC, Northwest, Southeast, St Louis Psych, Center for Behavioral Medicine.



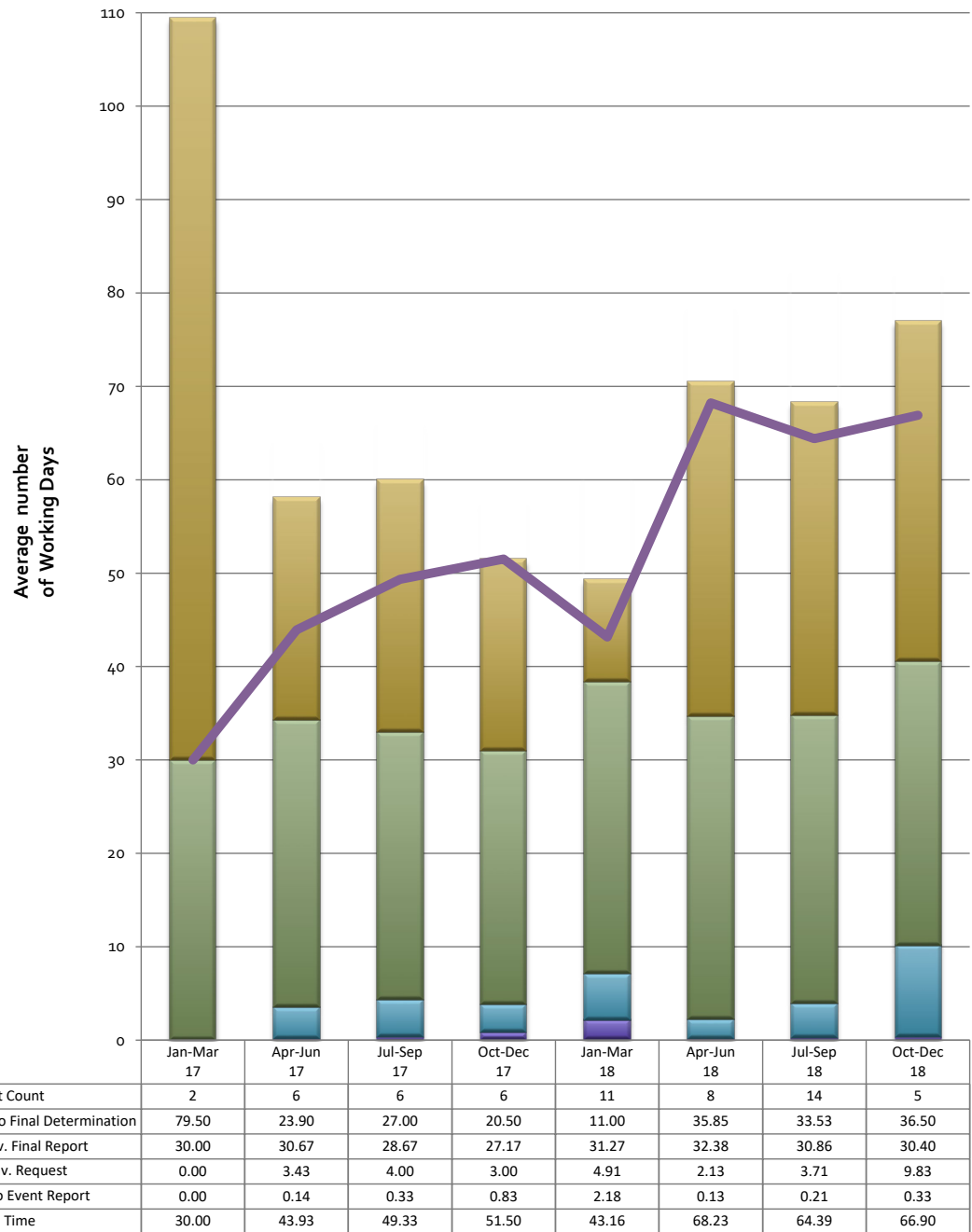
## Inpatient Inquiries into Potential Abuse/Neglect Allegations



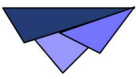
**NOTE:** If an event initially had an inquiry but then an A/N investigation, it is counted only as an investigation to ensure an unduplicated count of cases under review. Also note that a "decision" to open an investigation is only the start of the investigation process -- when a final judgment is made regarding an allegation that is called a "determination" and the investigation is completed.



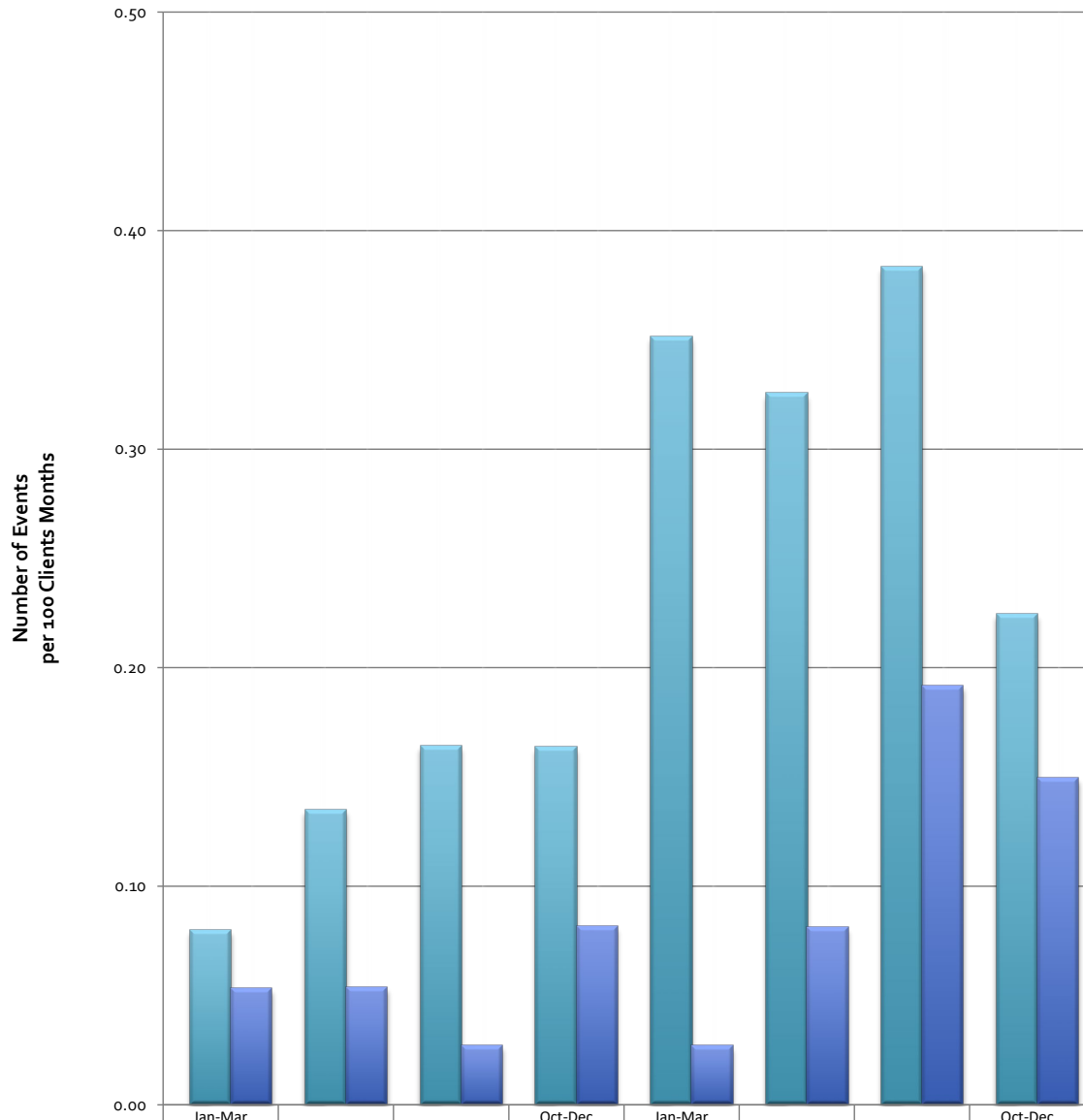
## Duration of Investigation Process for Inpatient Facilities



NOTE: Timelines are divided into 4 distinct stages of the investigation -- the bars show the average duration (in working days) for all final determinations made in each quarter, whereas the line superimposes the overall average duration of typical cases as defined by the 90% probability distribution of the times for each stage of the investigation.



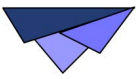
## Inpatient Abuse / Neglect Investigations



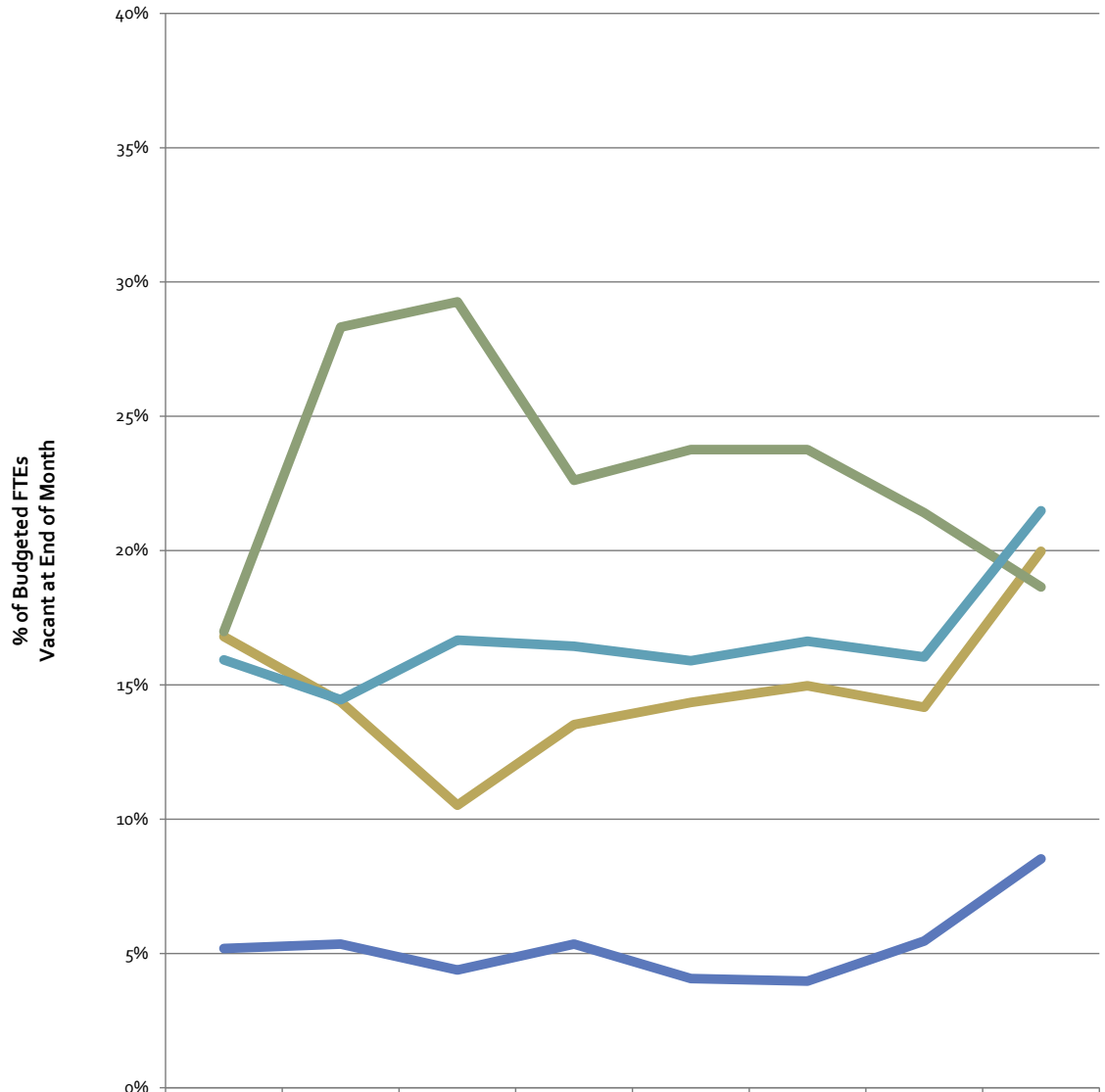
	Jan-Mar 17	Apr-Jun 17	Jul-Sep 17	Oct-Dec 17	Jan-Mar 18	Apr-Jun 18	Jul-Sep 18	Oct-Dec 18
CPS Inpt A/N Investigations Completed	3	5	6	6	13	12	14	6
A/N Investigations per 100 consumers/mo	0.08	0.14	0.16	0.16	0.35	0.33	0.38	0.22
Inpt A/N Substantiations	2	2	1	3	1	3	7	4
A/N Substantiations per 100 consumers/mo	0.05	0.05	0.03	0.08	0.03	0.08	0.19	0.15

NOTE: Investigations and Substantiations are a count of the number of events, not the number of alleged perpetrators or victims. Also, both counts reflect cases finalized in the quarter reported. Often, such measures are taken as a proportion of 1000 pt-days for inpatient events, but here we are using per 100 unique consumers per month in order to use the same measure as community rate.



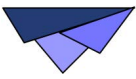


## CPS Operated Facility Staff Vacancy Rates

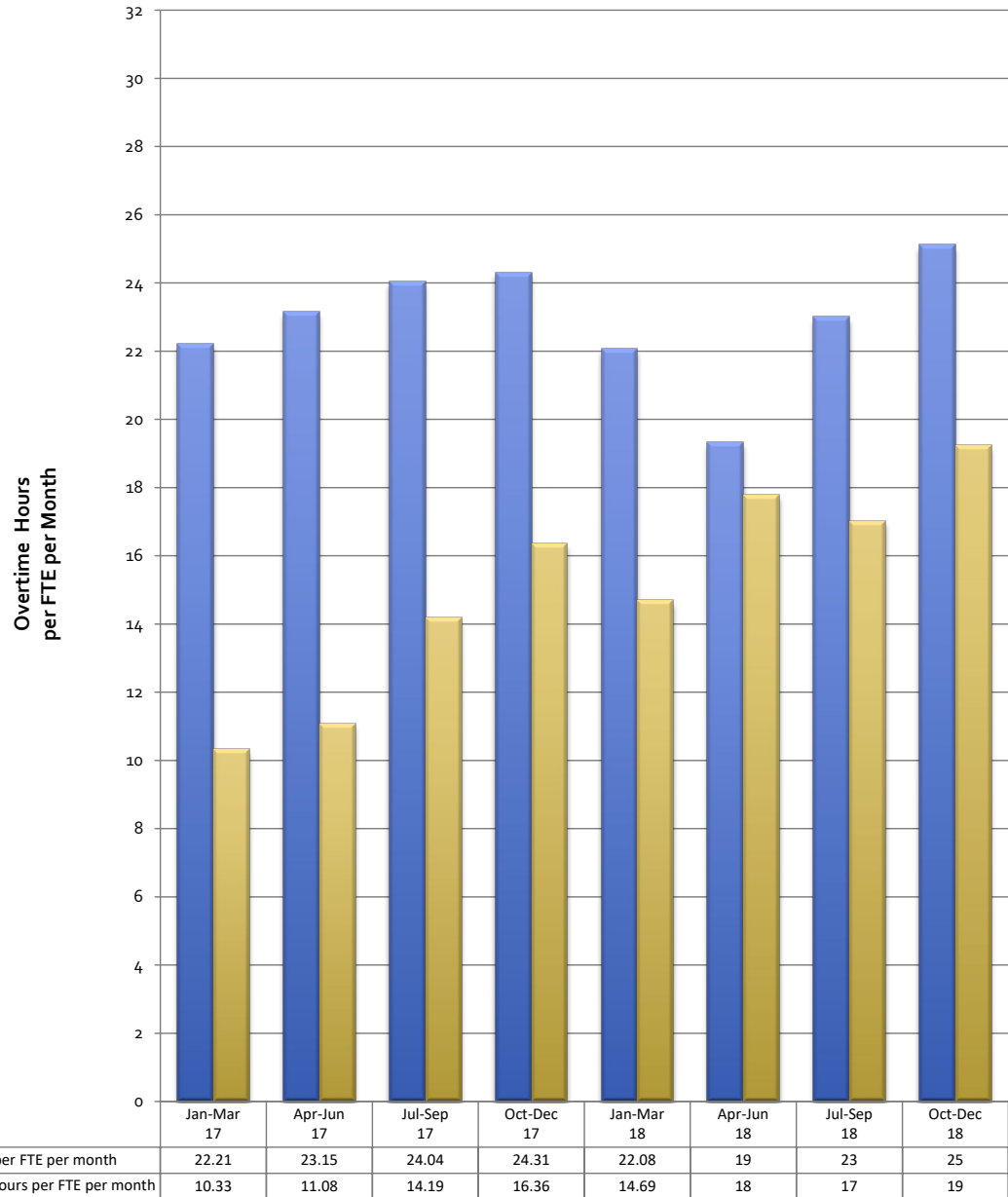


	Jan-Mar 17	Apr-Jun 17	Jul-Sep 17	Oct-Dec 17	Jan-Mar 18	Apr-Jun 18	Jul-Sep 18	Oct-Dec 18
Direct Care Staff Vacancy Rates	5.19%	5.34%	4.38%	5.35%	4.07%	3.97%	5.46%	8.52%
Licensed Nursing Staff Vacancy Rates	16.80%	14.37%	10.52%	13.52%	14.35%	14.97%	14.16%	19.97%
Psychologist Vacancy Rates	16.99%	28.32%	29.26%	22.61%	23.76%	23.76%	21.41%	18.64%
Psychiatrist Staff Vacancy Rates	15.93%	14.45%	16.67%	16.44%	15.90%	16.62%	16.03%	21.48%

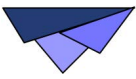
**SIGNIFICANCE:** Staff vacancy rates continue to be a problem, particularly for professional staff categories and are a factor in other cost and safety related metrics. The psychologist vacancy rates have been higher than other staff vacancy rates.



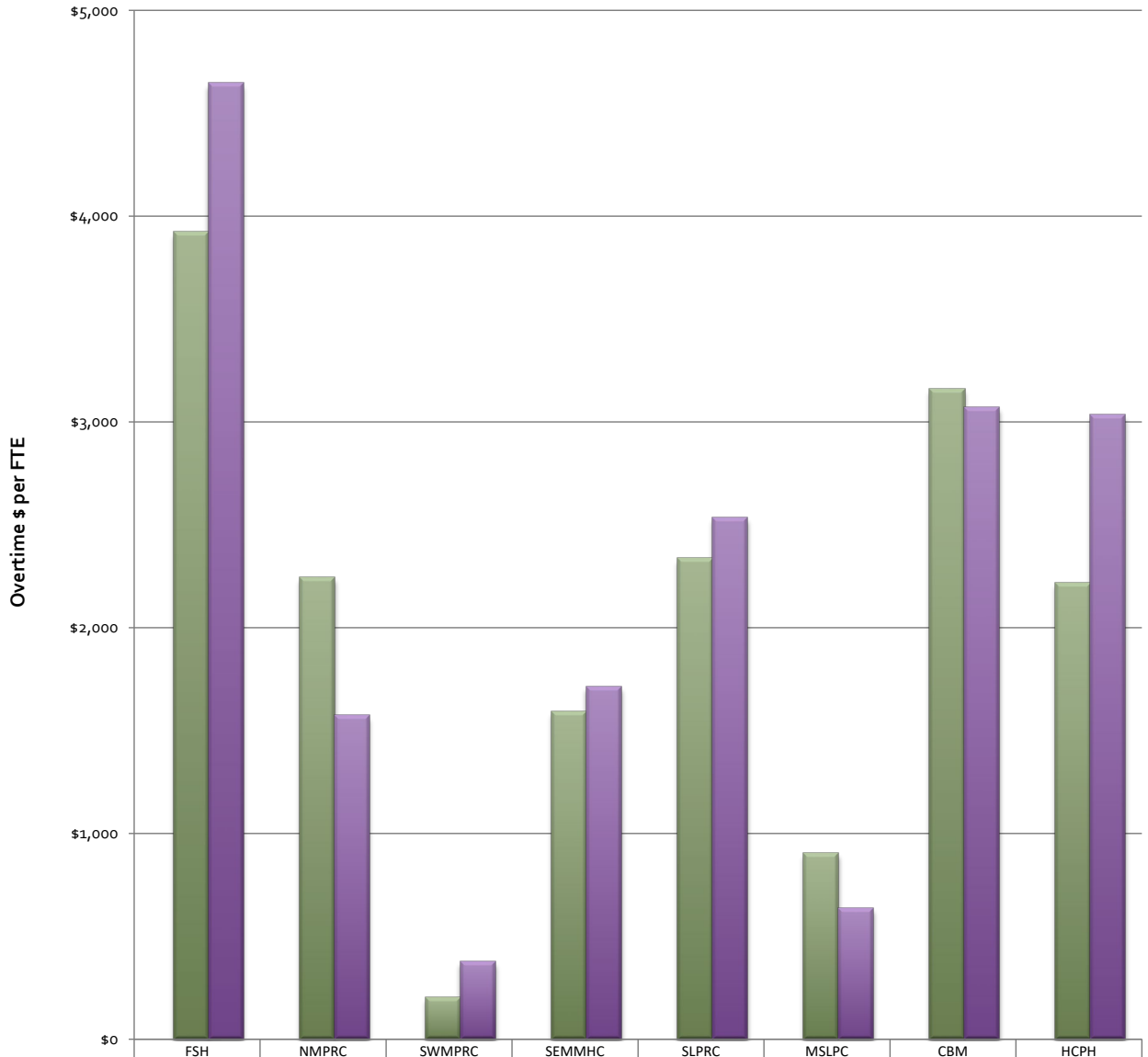
## CPS Operated Facility Overtime Hours per FTE per Month



**SIGNIFICANCE:** Facility staffing levels, even without vacancies, are near minimums required for safety so that continued vacancy rates have historically translated into more overtime for Direct Care staff.

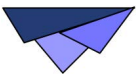


**Inpatient Facility, FY19 Overtime \$ per FTE  
versus FY18 Overtime \$ per FTE -- FY to date**

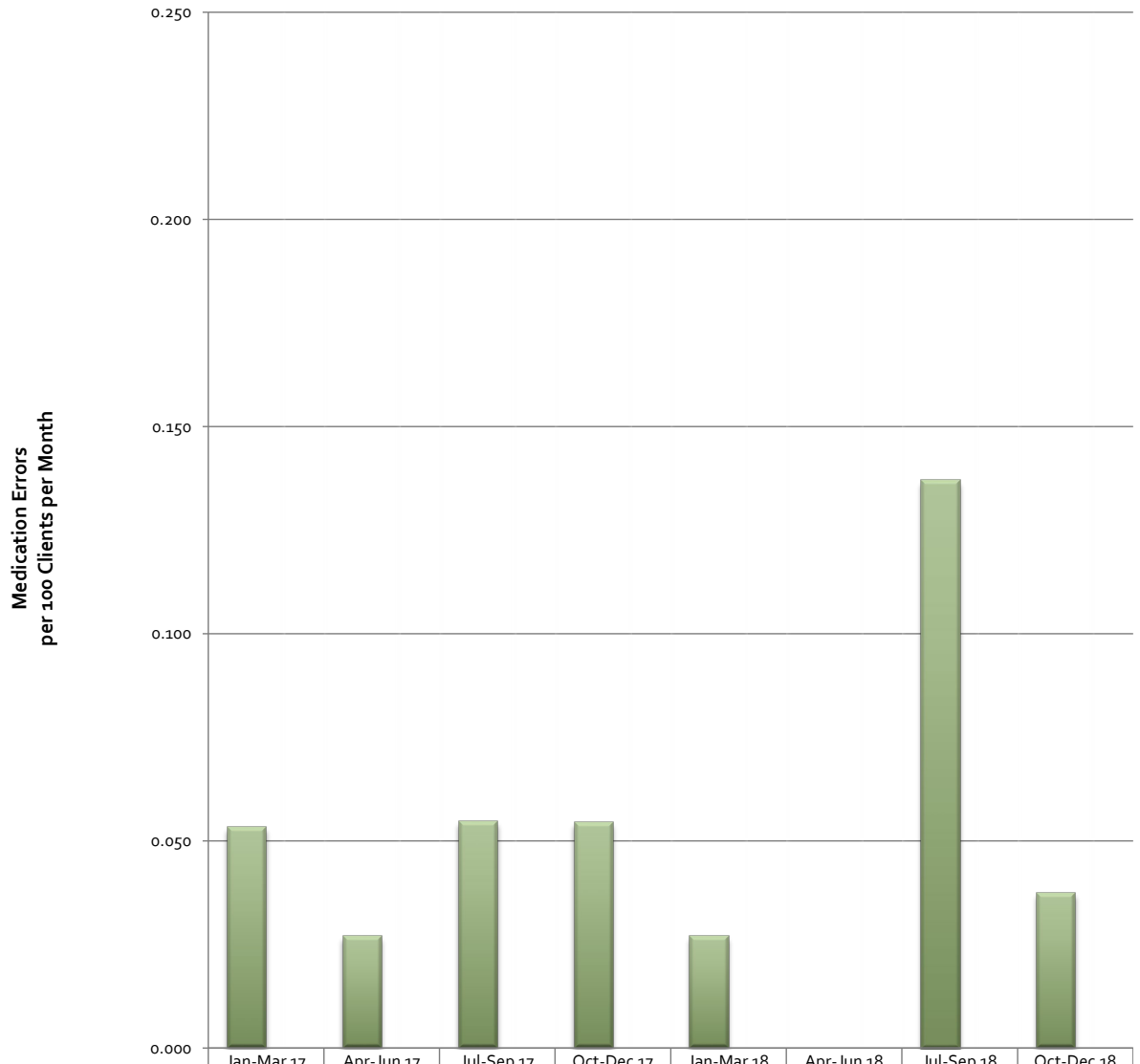


	FSH	NMPRC	SWMPRC	SEMMHC	SLPRC	MSLPC	CBM	HCPH
FY19 Direct Care Overtime \$M	2.54	0.32	0.01	0.74	0.66	0.10	0.37	0.27
FY19 Direct Care FTEs	647.50	144.00	38.00	465.98	280.50	114.50	116.50	121.60
Fy19 Direct Care OT \$ per FTE	\$3,922	\$2,246	\$205	\$1,593	\$2,337	\$905	\$3,162	\$2,218
FY18 Direct Care Overtime \$M	3.01	0.23	0.01	0.80	0.71	0.07	0.36	0.37
FY18 Direct Care FTEs	647.50	144.00	38.00	465.98	280.50	114.50	116.50	121.60
FY18 Direct Care OT \$ per FTE	\$4,647	\$1,574	\$379	\$1,714	\$2,537	\$638	\$3,071	\$3,034

NOTE: FTEs are budgeted FTEs, and "direct care" includes all Psych Techs, SAs, and all nursing staff. In order, the facilities are: Fulton, Northwest, Southwest, Southeast, St Louis Psych., Metro. St Louis, Center for Behavioral Medicine, and Hawthorn.



## Inpatient Medication Errors



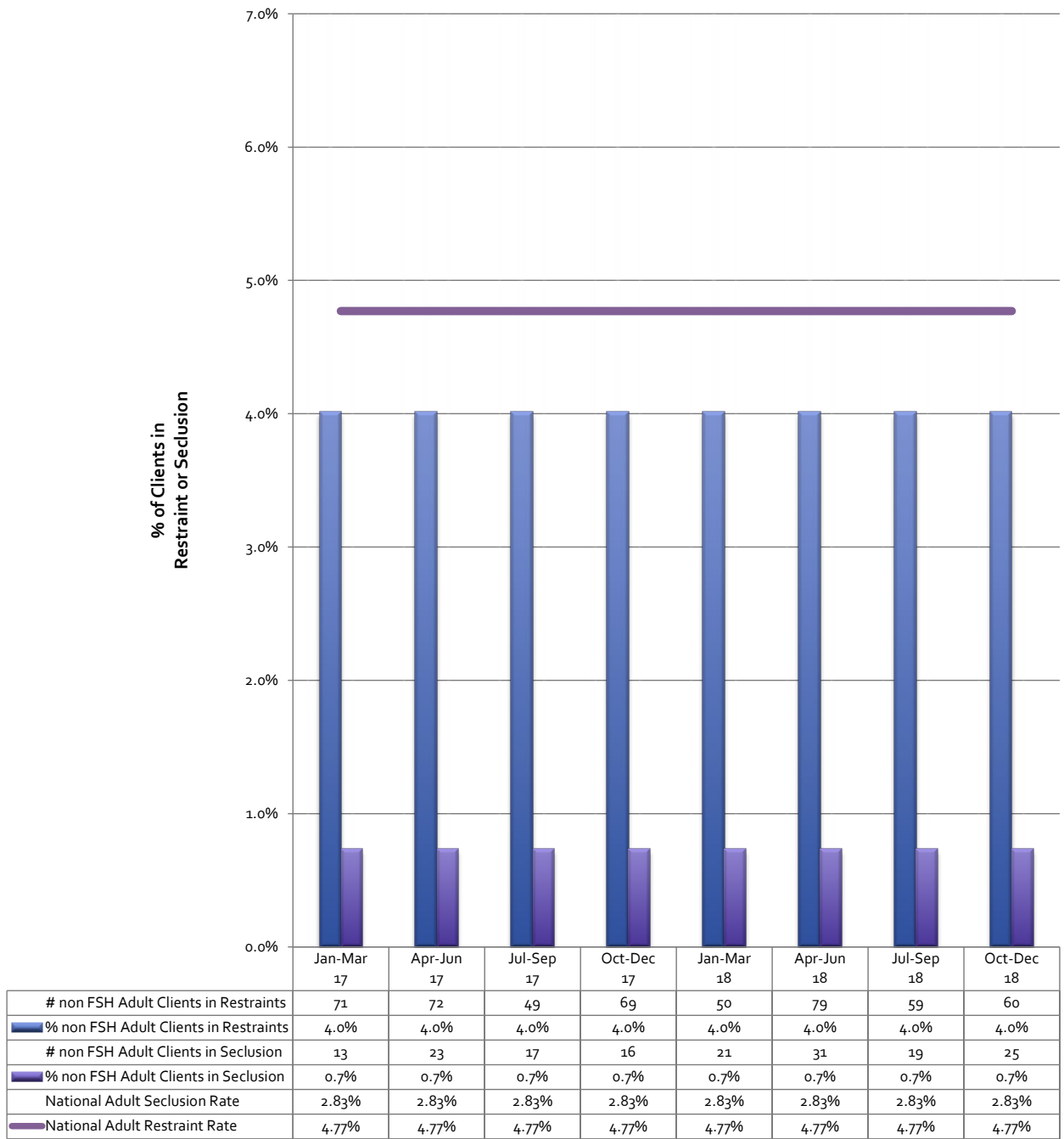
	Jan-Mar 17	Apr-Jun 17	Jul-Sep 17	Oct-Dec 17	Jan-Mar 18	Apr-Jun 18	Jul-Sep 18	Oct-Dec 18
Inpt "Moderate" Med Errors	2	1	2	2	1	0	5	1
Inpt "Moderate" Med Errors per 100 Consumers/mo	0.05	0.03	0.05	0.05	0.03	0.00	0.14	0.04
Inpt "Serious" Med Errors	0	0	0	0	0	0	0	0
Inpt "Serious" Med Errors per 100 Consumers/mo	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unduplicated Client-month count	3,747	3,700	3,649	3,665	3,699	3,686	3,649	2,670

**SIGNIFICANCE:** "Minimal" severity med errors are tracked and reviewed for inpatient but not shown here in order to emphasize the rarer but higher profile categories of error. "Moderate" medication errors are those resulting in the need for treatment and/or interventions beyond monitoring and observation. "Serious" medication errors are those with life threatening and/or permanent adverse consequences.

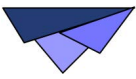
**NOTE:** In the most recent quarter no "moderate" medication errors have been reported.



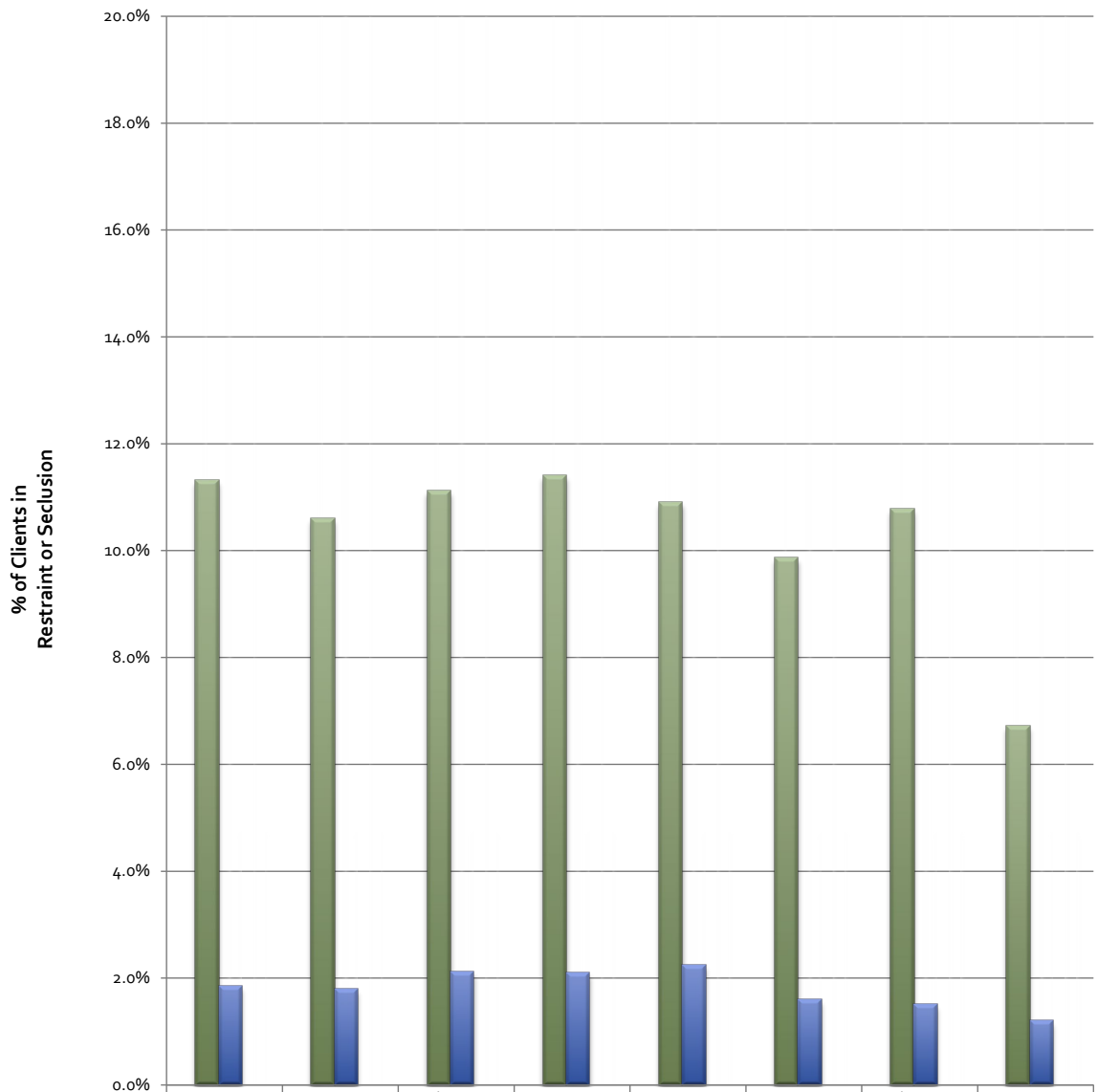
## Inpatient Adult Restraint & Seclusion Use



**SIGNIFICANCE:** This graph excludes FSH and illustrates that adult inpatient programs outside of FSH have restraint and seclusions rates that compare favorably to the national benchmark rates. Even so, various projects are under way around the state to help reduce reliance on restraint and seclusion.

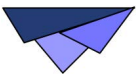


## Fulton State Hospital Restraint & Seclusion Use

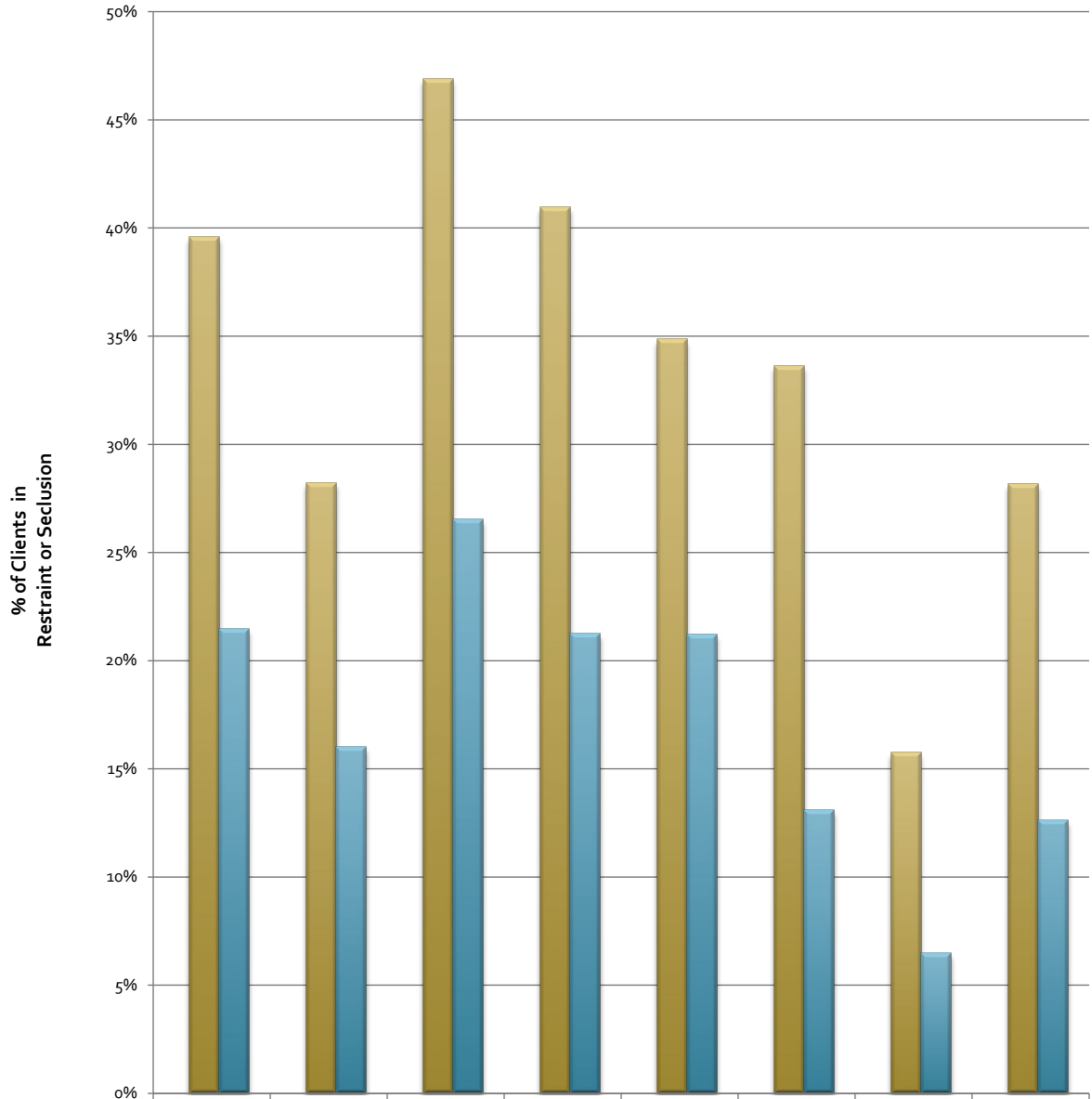


	Jan-Mar 17	Apr-Jun 17	Jul-Sep 17	Oct-Dec 17	Jan-Mar 18	Apr-Jun 18	Jul-Sep 18	Oct-Dec 18
# FSH Clients in Restraints	140	130	136	141	136	123	135	84
% FSH Clients in Restraints (per month)	11.3%	10.6%	11.1%	11.4%	10.9%	9.9%	10.8%	6.7%
# FSH Clients in Seclusion	23	22	26	26	28	20	19	15
% FSH Clients in Seclusion (per month)	1.9%	1.8%	2.1%	2.1%	2.2%	1.6%	1.5%	1.2%
# Adult Clients in Seclusion	36	45	43	42	49	51	38	40
National Adult Restraint Rate	4.77%	4.77%	4.77%	4.77%	4.77%	4.77%	4.77%	4.77%

**SIGNIFICANCE:** CPS has several projects under way to help reduce reliance on restraint use. The most recent quarters show lower rates of restraint usage seen at FSH for this reporting period, although as expected the rate is still higher than seen at lower security facilities. FSH seclusion usage is also above the national benchmark rate for seclusion, but as with the restraint benchmark rate the benchmark includes all lower security level facilities.

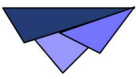


## Inpatient Youth Restraint & Seclusion Use

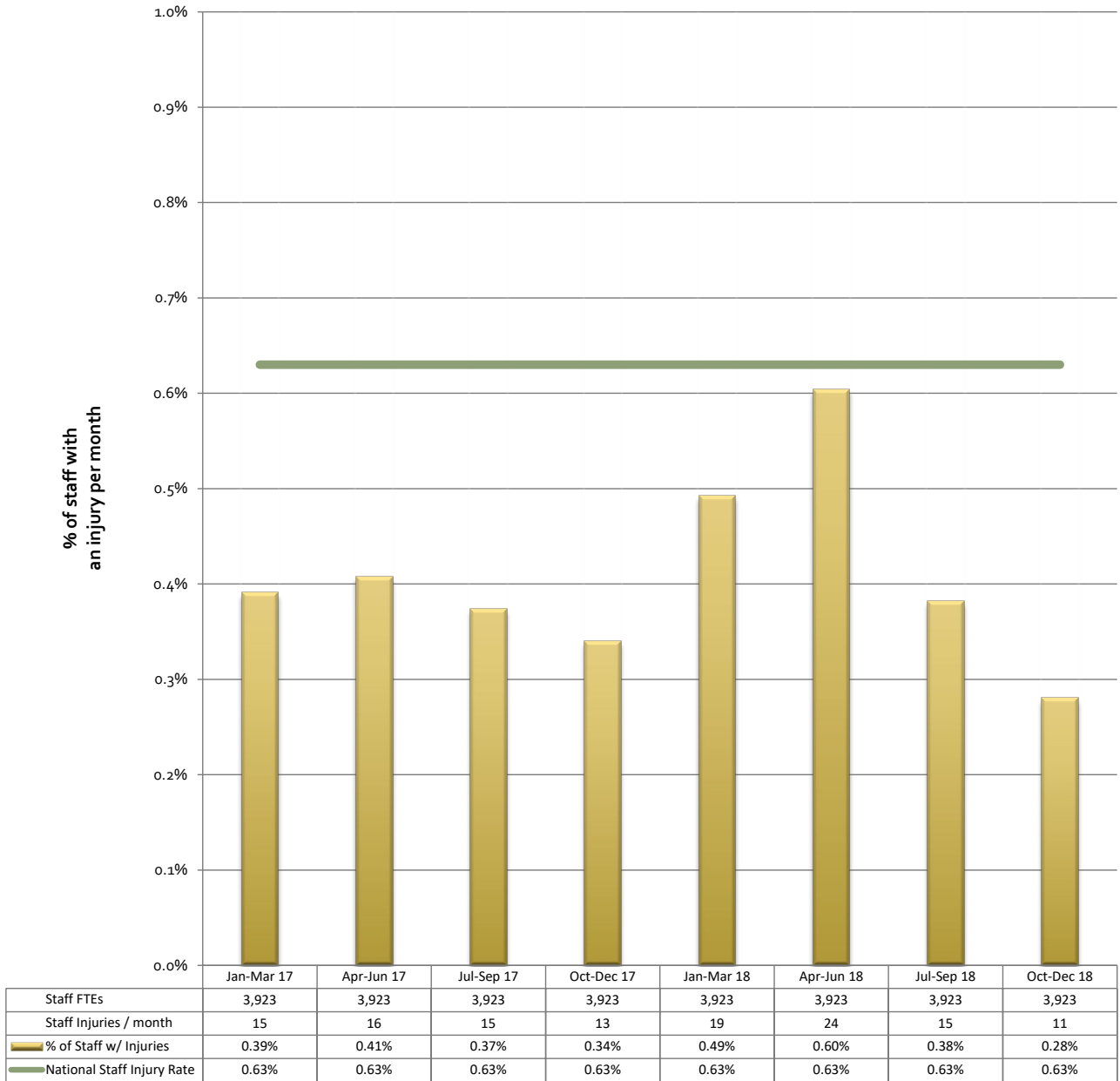


	Jan-Mar 17	Apr-Jun 17	Jul-Sep 17	Oct-Dec 17	Jan-Mar 18	Apr-Jun 18	Jul-Sep 18	Oct-Dec 18
# Youth in Restraints	59	44	53	52	46	41	17	29
% Youth in Restraints (per month)	0.40	0.28	0.47	0.41	0.35	0.34	0.16	0.28
# Youth in Seclusion	32	25	30	27	28	16	7	13
% Youth in Seclusion (per month)	0.21	0.16	0.27	0.21	0.21	0.13	0.06	0.13

**SIGNIFICANCE:** The youth restraint use rate appears to have established a higher overall rate than the relative lows of two years ago. This is generally attributed to higher acuity levels and persists in spite of continued efforts to reduce reliance on restraint. We do not have benchmark rates specific to youth for restraint and seclusion, but NRI age stratification reports confirm significantly higher rates of restraint and seclusion for youth inpatient compared to adult inpatient nationwide. The majority of youth restraint usage is for brief manual holds.



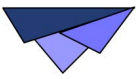
## Inpatient Direct Care Staff Injuries



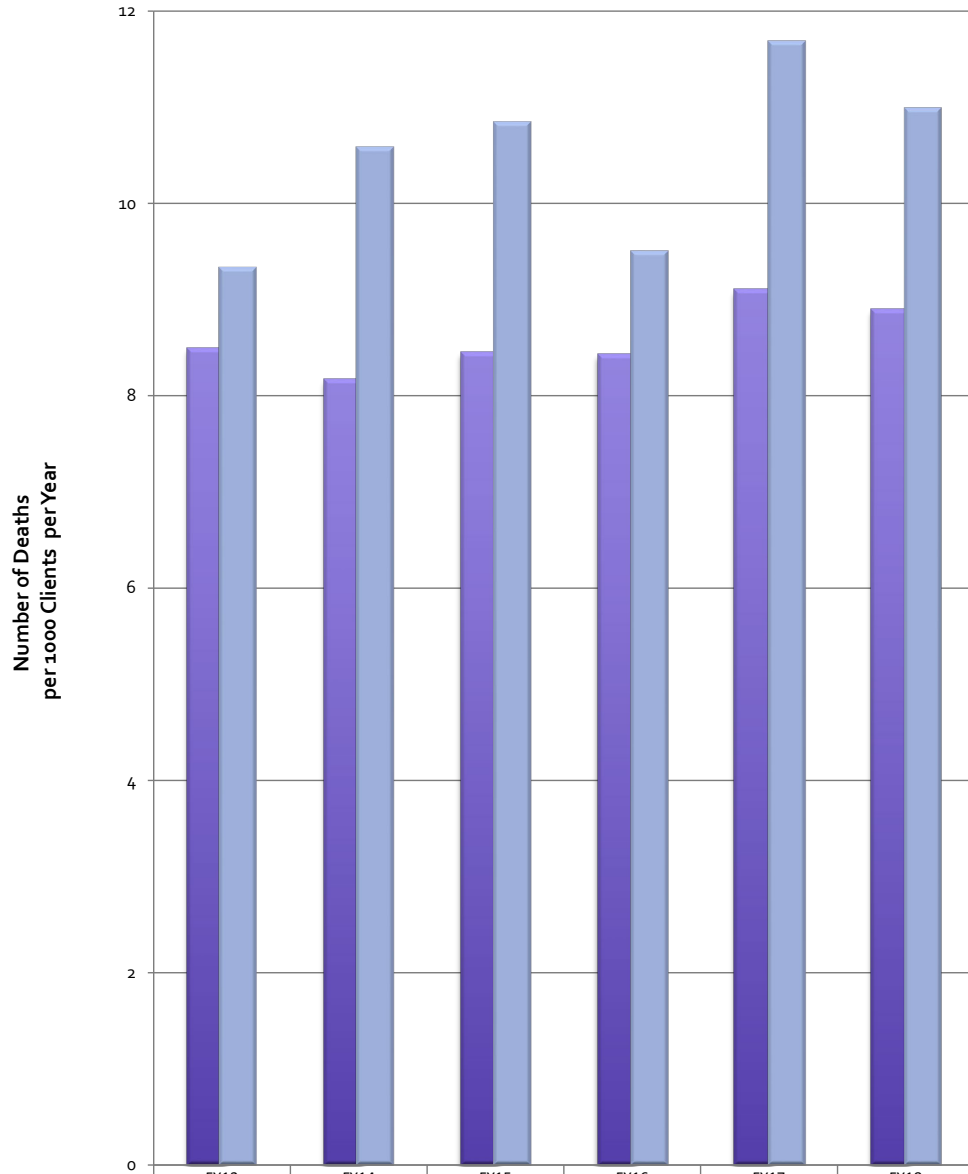
**NOTE:** Includes injuries requiring any medical care or hospitalization, but not first aid only. National average for inpatient staff in SFY 2012 (ORYX) was .63% of staff per month. (National rate is reported as per 1000 inpatient days, converted here into per FTE using Missouri inpatient days per FTE.)

**SIGNIFICANCE:** It should be noted that at such levels of injury the provision of psychiatric care remains a very high risk profession compared to other career opportunities. For four recent quarters the rate was lower than the national rate.



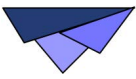


## Psychiatric Services Mortality Rate in Community

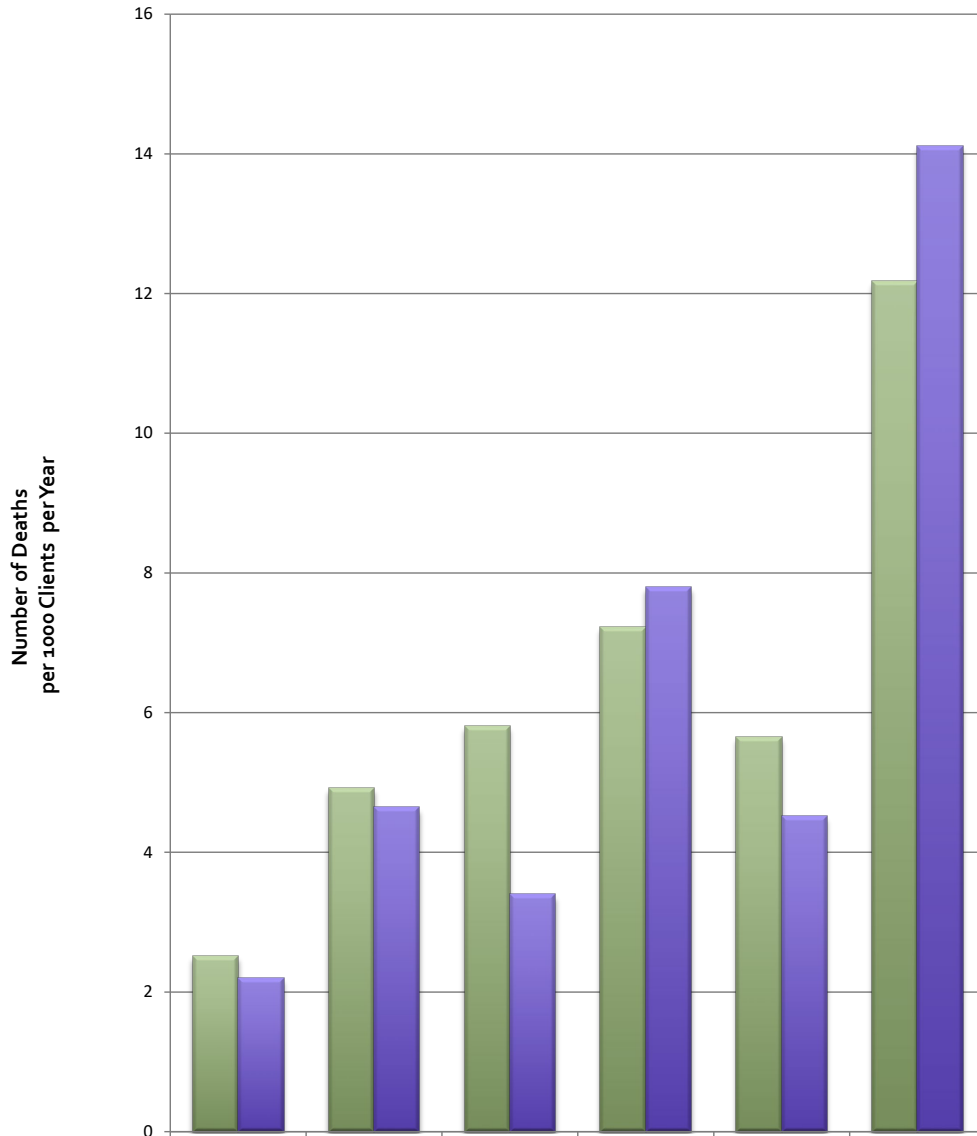


	FY13	FY14	FY15	FY16	FY17	FY18
CPS Community Client Deaths	491	500	526	532	586	613
CPS Community Crude Mortality / 1000	8.50	8.18	8.45	8.43	9.11	8.90
Missouri Vital Statistics Crude Mortality / 1000	9.3	9.5	9.6	9.8	9.8	10.1
CPS Community Age Adj Mortality / 1000	9.34	10.59	10.85	9.51	11.69	10.99
Missouri Vital Statistics Age Adj Mortality / 1000	8.0	8.0	8.0	8.2	8.1	8.2

NOTE: The crude mortality rate compares to the Missouri community mortality rate of 8.90 deaths per 1000 Missouri residents (2018 MO Vital Statistics). The age adjusted mortality rate for all of Missouri in 2018 was 8.2 deaths per 1000 residents. National studies report clients of psychiatric services with twice the community age adjusted mortality rate.

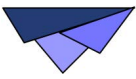


## Mortality Rate in State Operated Inpatient Care

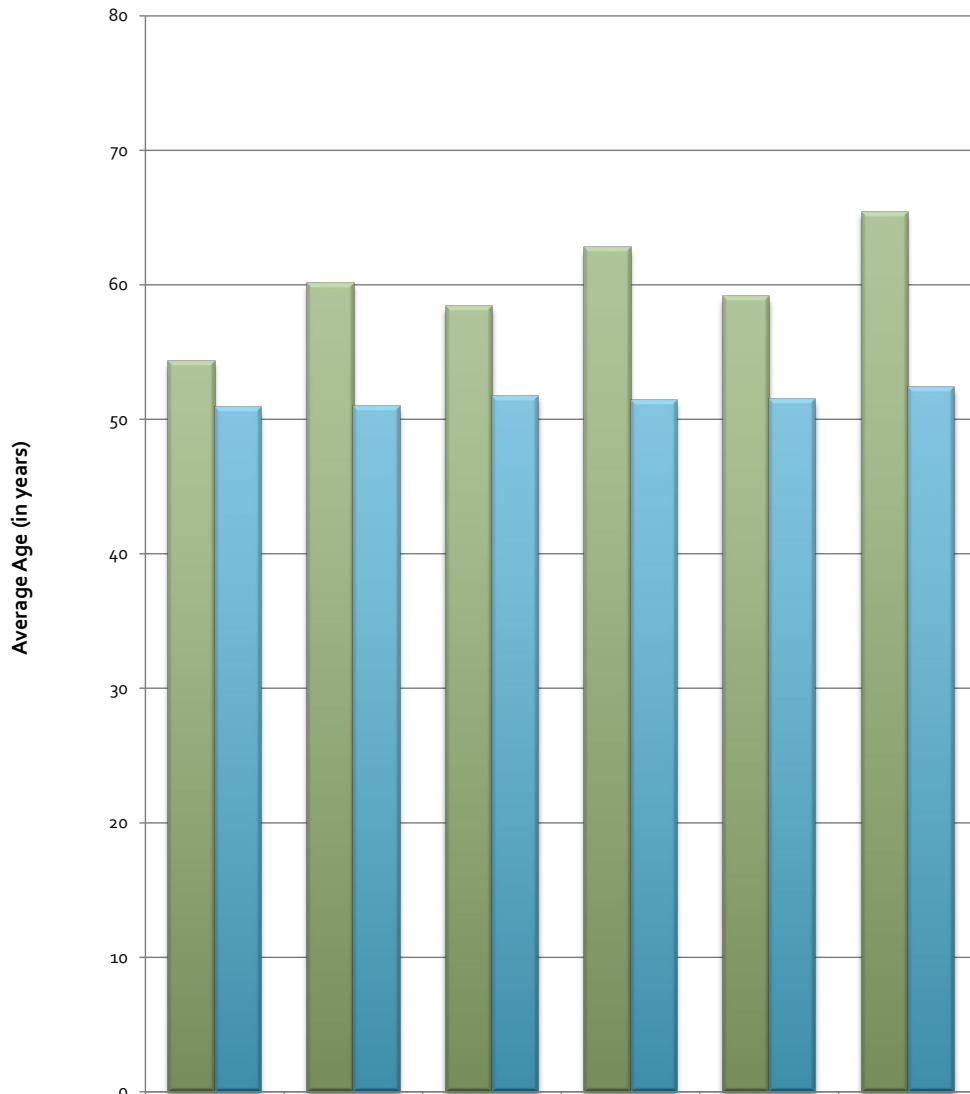


	FY13	FY14	FY15	FY16	FY17	FY18
CPS Inpt Client Deaths	3	6	7	9	7	15
CPS Inpt Crude Mortality / 1000	2.52	4.92	5.81	7.22	5.65	12.18
Missouri Vital Statistics Crude Mortality / 1000	9.3	9.5	9.6	9.8	9.8	10.1
CPS Inpt Age Adj Mortality / 1000	2.20	4.64	3.39	7.80	4.51	14.12
Missouri Vital Statistics Age Adj Mortality / 1000	8.0	8.0	8.0	8.2	8.1	8.2

NOTE: The crude mortality rate compares to the Missouri inpatient mortality rate of 10.0 deaths per 1000 Missouri residents. (2017 MO Vital Statistics). The age adjusted mortality rate for all of Missouri in 2016 was 8.1 deaths per 1000 residents. National studies report clients of psychiatric services with twice the community age adjusted mortality rate but FY17 rates for MO inpatient compare favorably to MO average and FY17 had 5 inpatient client deaths reported.



## Psychiatric Services Average Age at Death



	FY13	FY14	FY15	FY16	FY17	FY18
Average Age at Death all MO Residents	73.0	73.0	72.9	72.6		
CPS Inpt Average Age at Death	54.33	60.17	58.43	62.78	59.14	65.4
CPS Inpt Client Deaths	3	6	7	9	7	15
CPS Community Average Age at Death	50.91	50.99	51.76	51.46	51.49	52.38
CPS Community Client Deaths	491	500	526	532	586	613

NOTE: Deaths reported for all psychiatric inpatient and community subpopulations. All Missouri average is calculated from the "Missouri Vital Statistics".

**SIGNIFICANCE: National studies show that the clients of state mental health agencies die 20-25 years younger than the general population. Unfortunately, Missouri is right in line with this alarming statistic. This underlines the importance of various efforts to better integrate the physical and mental health care of our clients throughout the state.**

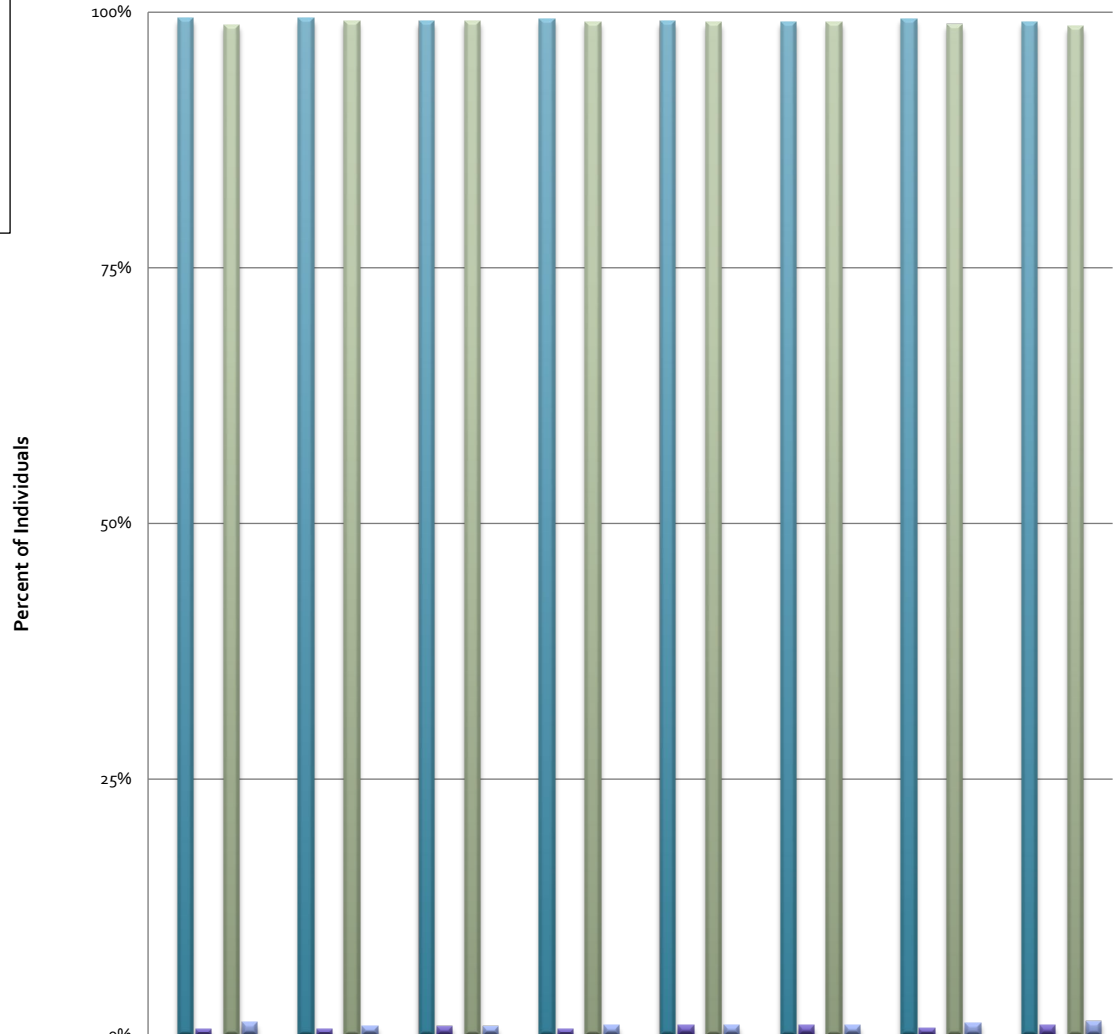


# Division of Developmental Disabilities



## Division of DD Residential Medicaid Eligibility

Note: The proportion of Medicaid Eligible DD individuals has remained consistent over the past two years. Method of data collection for community residential altered to be consistent with budget measures in Jan-Mar 2016.

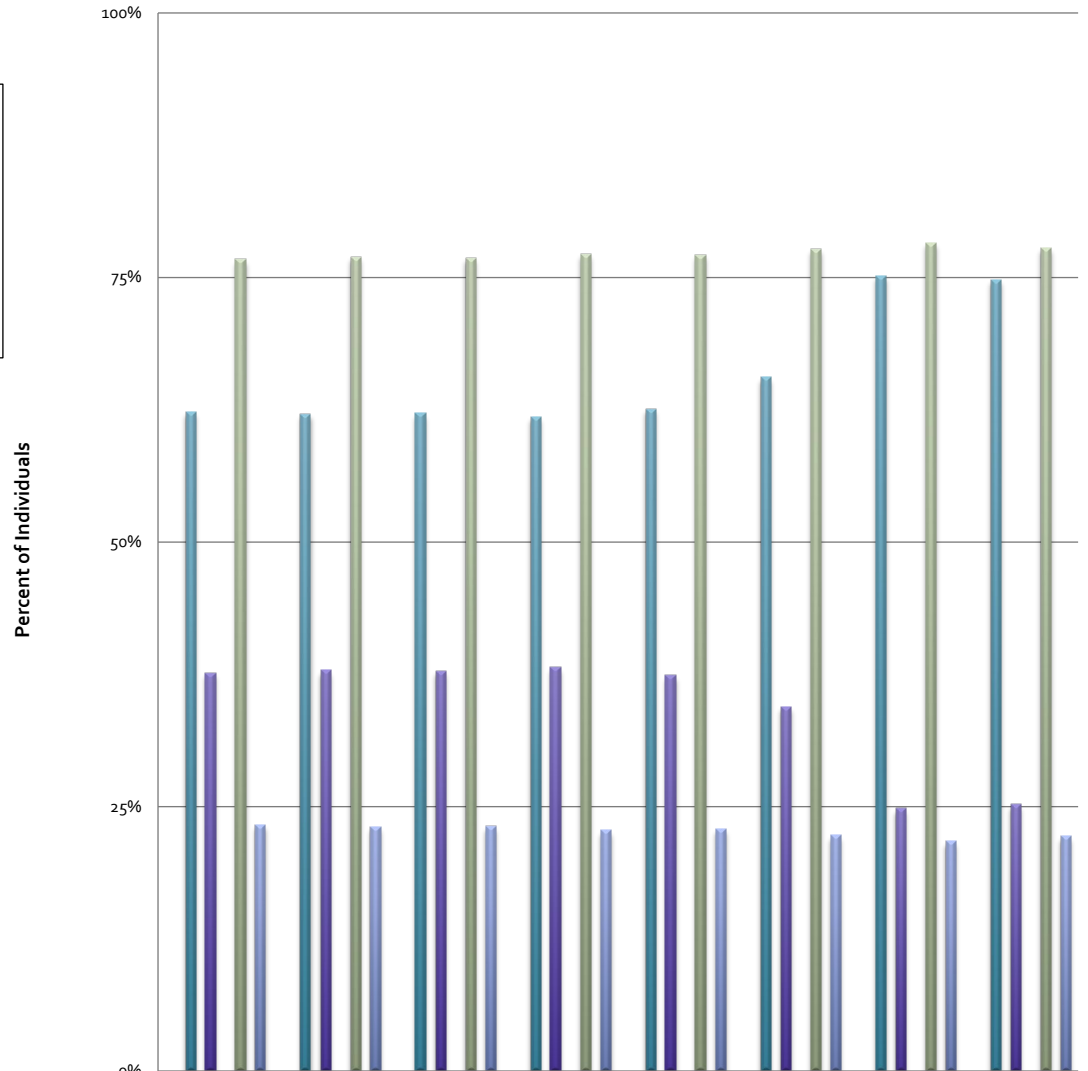


	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
# Individuals Served in Hab Centers	341	329	334	328	328	325	320	318
# HC Individuals Medicaid Eligible	339	327	331	326	325	322	318	315
% HC Individuals Medicaid Eligible	99%	99%	99%	99%	99%	99%	99%	99%
# HC Individuals Not Medicaid Eligible	2	2	3	2	3	3	2	3
% HC Individuals Not Medicaid Eligible	1%	1%	1%	1%	1%	1%	1%	1%
# Individuals Served in Community Residential	7409	7432	7437	7445	7448	7490	7525	7533
# Individuals Community Medicaid Eligible	7318	7368	7375	7375	7375	7421	7436	7428
% Individuals Community Medicaid Eligible	99%	99%	99%	99%	99%	99%	99%	99%
# Individuals Community Not Medicaid Eligible	91	64	62	70	73	69	89	105
% Individuals Community Not Medicaid Eligible	1%	1%	1%	1%	1%	1%	1%	1%



## Division of DD Non-Residential Medicaid Eligibility

Note: The proportion of Medicaid Eligible DD individuals has remained consistent over the past two fiscal years. Method for collecting figures on individuals with other services and in CM only changed to be consistent with manner of collection for budget measures in Jan-Mar 2016.

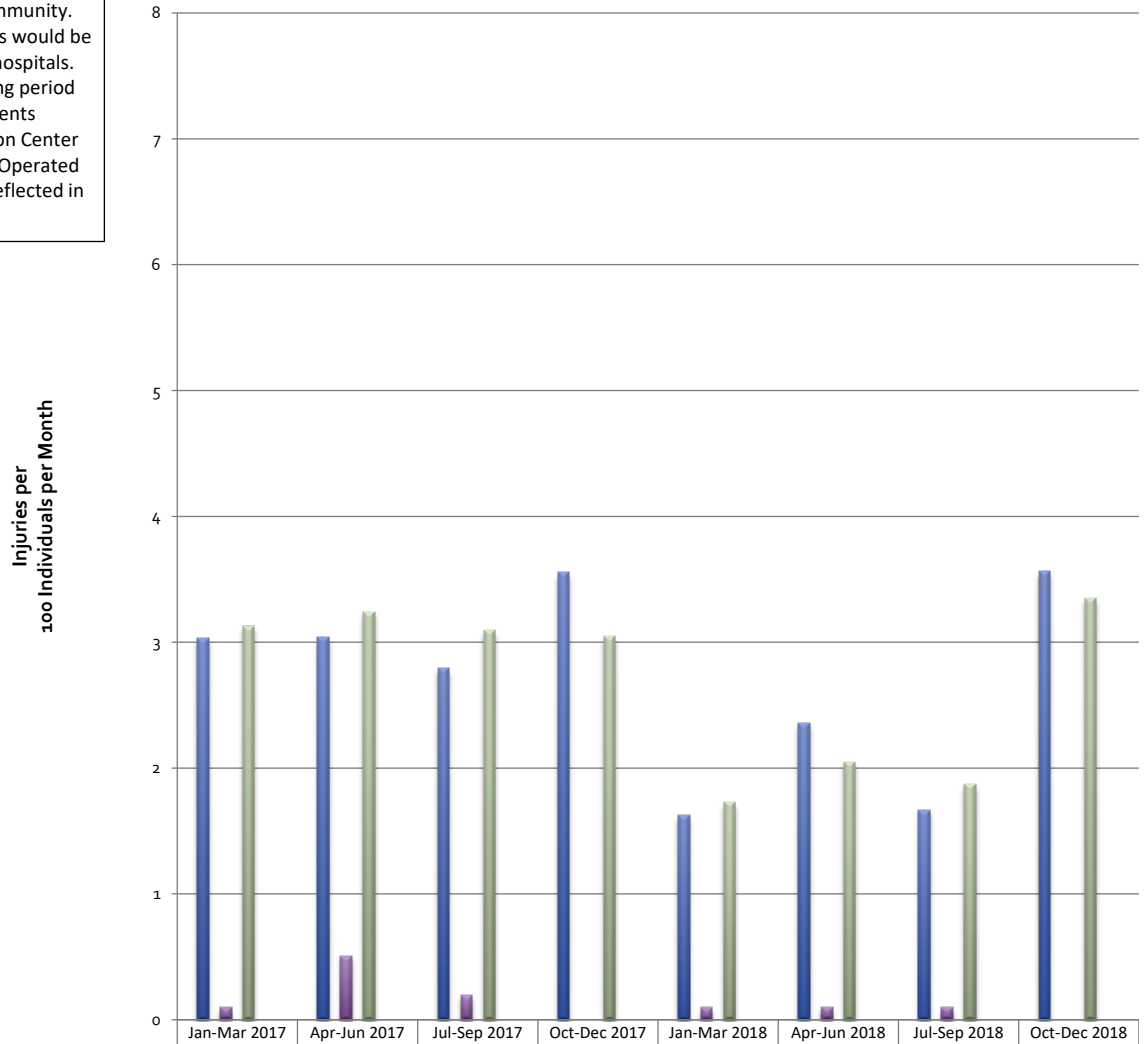


	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
# Individuals served in Case Management (CM) Only	15376	15691	15679	15774	15706	15130	12986	12694
# Individuals CM Only Medicaid Eligible	9585	9747	9744	9756	9831	9922	9760	9493
% Individuals CM Only Medicaid Eligible	62%	62%	62%	62%	63%	66%	75%	75%
# Individuals Case Mngmt Only Not Medicaid Eligible	5791	5944	5935	6018	5875	5208	3226	3201
% Individuals CM Only Not Medicaid Eligible	38%	38%	38%	38%	37%	34%	25%	25%
# Individuals Served in Other Services	12972	13128	13619	13880	14218	14435	14524	14718
# Individuals Other Services Medicaid Eligible	9949	10107	10467	10721	10965	11220	11370	11450
% Individuals Other Services Medicaid Eligible	77%	77%	77%	77%	77%	78%	78%	78%
# Individuals Other Services Not Medicaid Eligible	3023	3027	3152	3159	3253	3215	3154	3268
% Individuals Other Services Not Medicaid Eligible	23%	23%	23%	23%	23%	22%	22%	22%



## Division of DD Habilitation Center Campus Injuries per 100 Individuals

NOTE: Medical intervention denotes care requiring attention by a licensed professional and could occur either be on campus or in the community. Hospitalization and ER visits would be off campus at community hospitals. Beginning with the reporting period July-Sep 2013, data represents individuals from Habilitation Center Campus (HCC) sites. State Operated Waiver Programs data is reflected in community data tables.

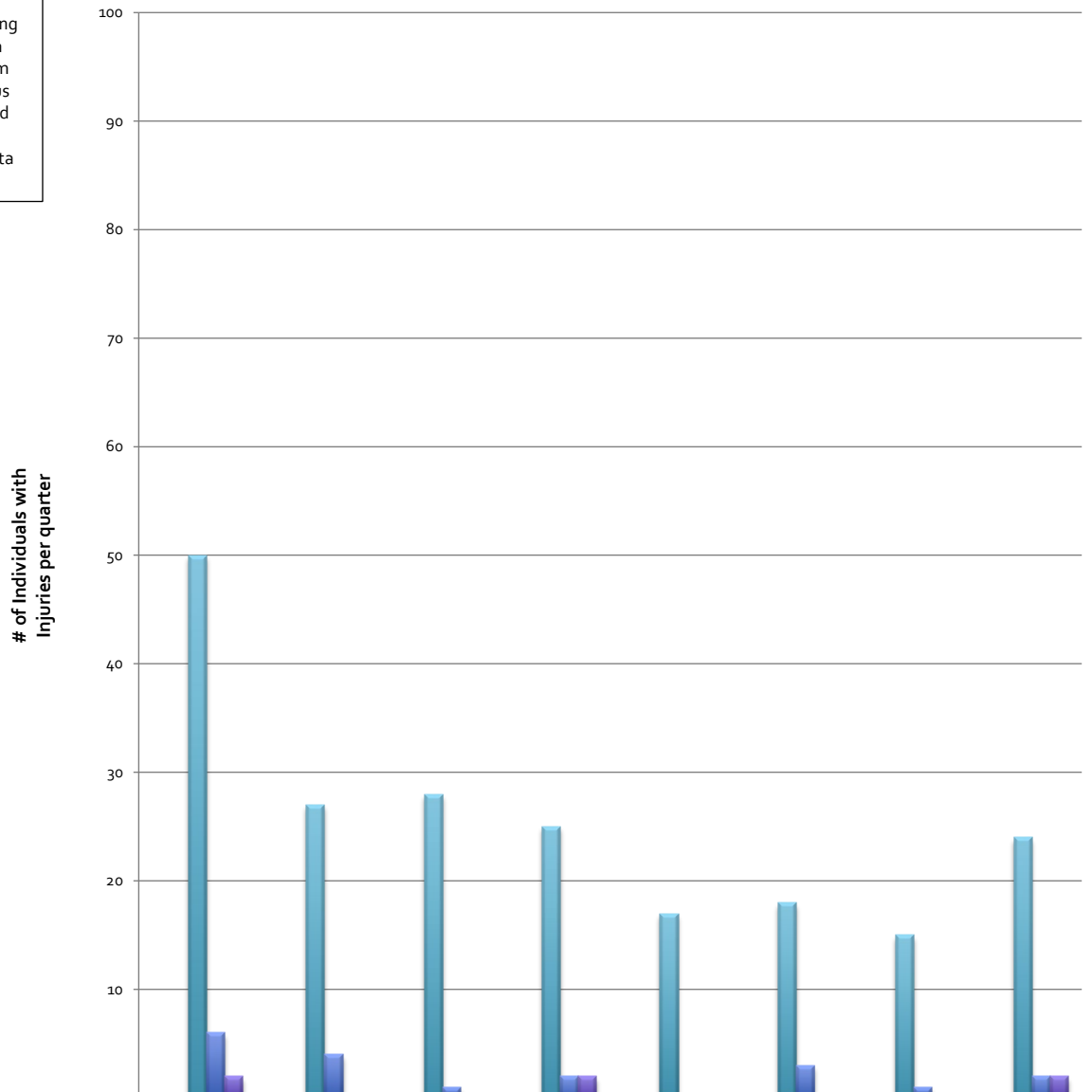


	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
# HCC Injuries Resulting in Medical Intervention	31	30	28	35	16	23	16	34
# HCC Injuries Resulting in Medical Intervention per 100 Indiv/mo	3.0	3.0	2.8	3.6	1.6	2.4	1.7	3.6
# HCC Injuries Resulting in Hospitalization	1	5	2	0	1	1	1	0
# HCC Injuries Resulting in Hospitalization per 100 Indiv/mo	0.1	0.5	0.2	0.0	0.1	0.1	0.1	0.0
# HCC Injuries Resulting in Emergency Room Visits	32	32	31	30	17	20	18	32
# HCC Injuries Resulting in Emergency Room Visits per 100 Indiv/mo	3.1	3.2	3.1	3.0	1.7	2.1	1.9	3.4
# HCC Injuries Resulting in Death	0	0	0	0	0	0	0	0
# HCC Injuries Resulting in Death per 100 Individuals/month	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
# Individuals in Hab Centers	341	329	334	328	328	325	320	318



## Division of DD Habilitation Center Campus Individuals with 1, 2, or 3+ Injuries

Note: An injury is defined as that which required treatment of more than first aid. Beginning with the reporting period July-Sep 2013, data represents individuals from Habilitation Center Campus (HCC) sites. State Operated Waiver Programs data is reflected in community data tables.



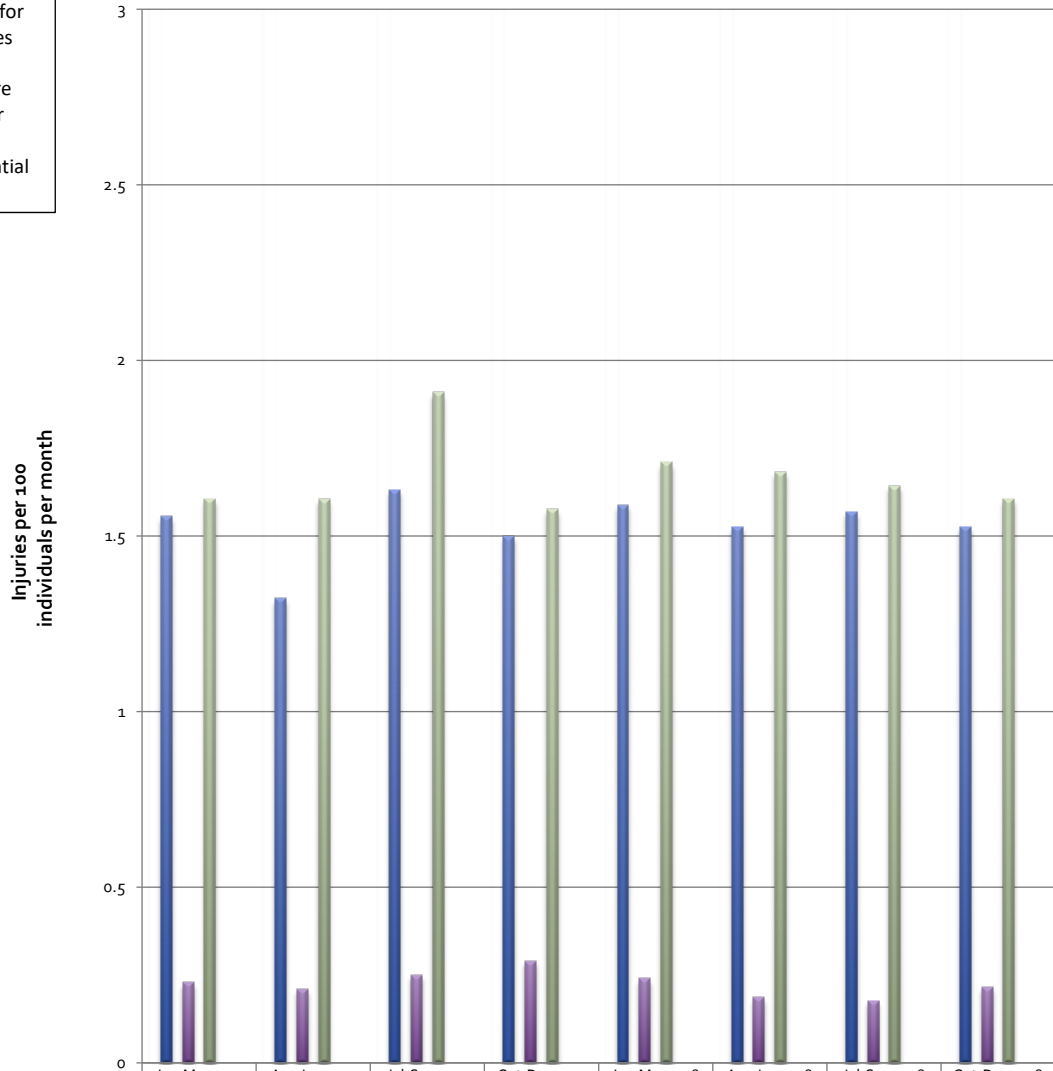
	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
# HCC Individuals	341	329	334	328	328	325	320	318
# HCC Individuals with No Injuries	283	298	305	299	311	304	304	290
# HCC Individuals with Exactly 1 Injury	50	27	28	25	17	18	15	24
# HCC Individuals with Exactly 2 Injuries	6	4	1	2	0	3	1	2
# HCC Individuals with 3+ Injuries	2	0	0	2	0	0	0	2





## Division of DD Community Residential Injuries per 100 Individuals

NOTE: Medical intervention denotes care requiring attention by a licensed professional and for community individuals indicates care provided in primary care physician's office or urgent care center. State Operated Waiver Programs information now included in community residential data.

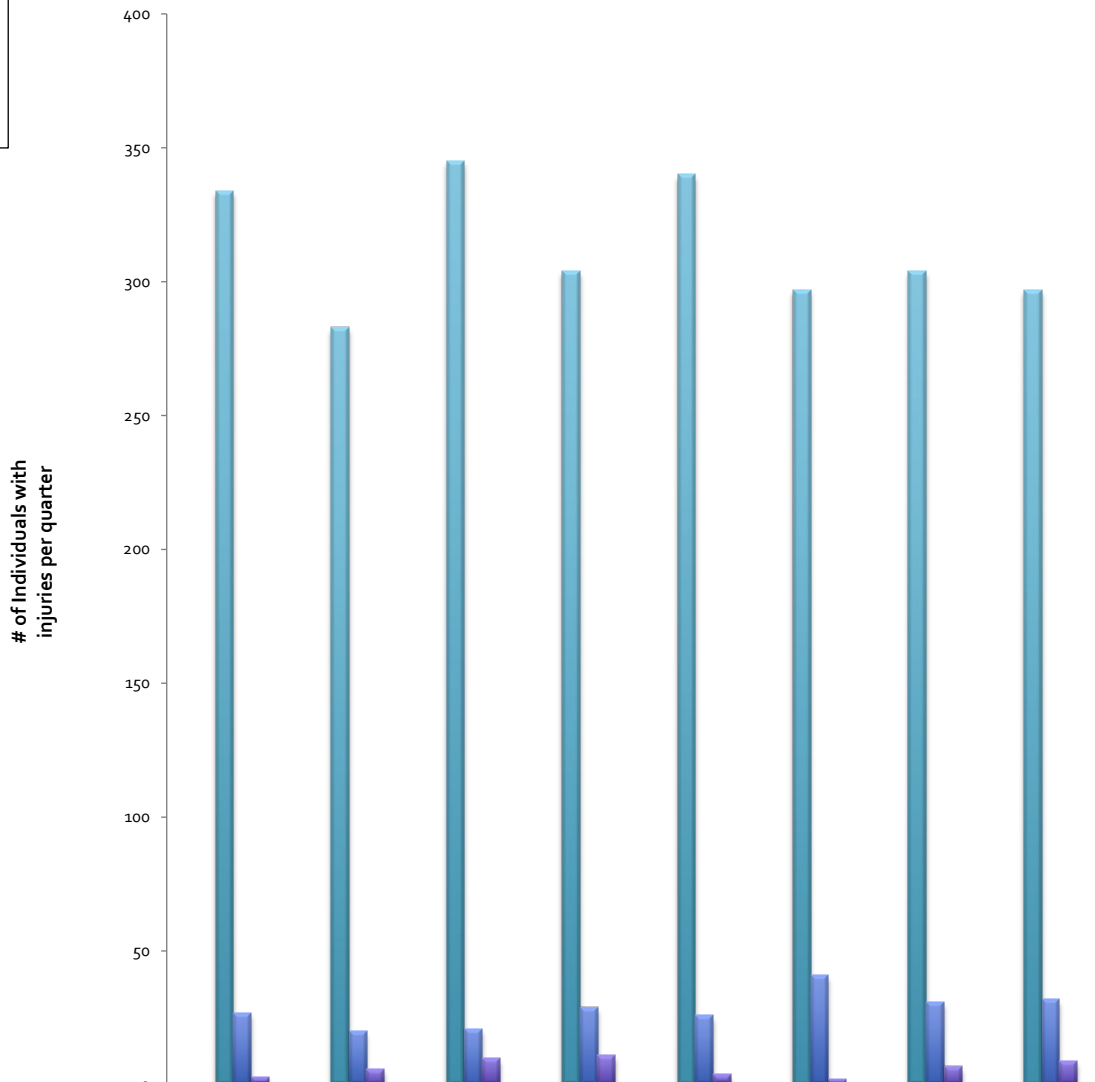


	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
# Community Injuries Resulting in Medical Intervention	346	295	364	335	355	343	354	345
■ Community Injuries Resulting in Medical Intervention per 100 Indiv/mo	1.6	1.3	1.6	1.5	1.6	1.5	1.6	1.5
# Community Injuries Resulting in Hospitalization	51	47	56	65	54	42	40	49
■ Community Injuries Resulting in Hospitalization per 100 Indiv/mo	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2
# Community Injuries Resulting in Emergency Room Visits	357	358	426	352	382	378	371	363
■ Community Injuries Resulting in ER Visits per 100 Indiv/mo	1.6	1.6	1.9	1.6	1.7	1.7	1.6	1.6
# Community Injuries Resulting in Death	0	0	0	0	0	0	0	0
■ Community Injuries Resulting in Death per 100 Indiv/mo	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
# Community Residential Individuals	7409	7432	7437	7445	7448	7490	7525	7533



## Division of DD Community Individuals with 1, 2, or 3+ Injuries

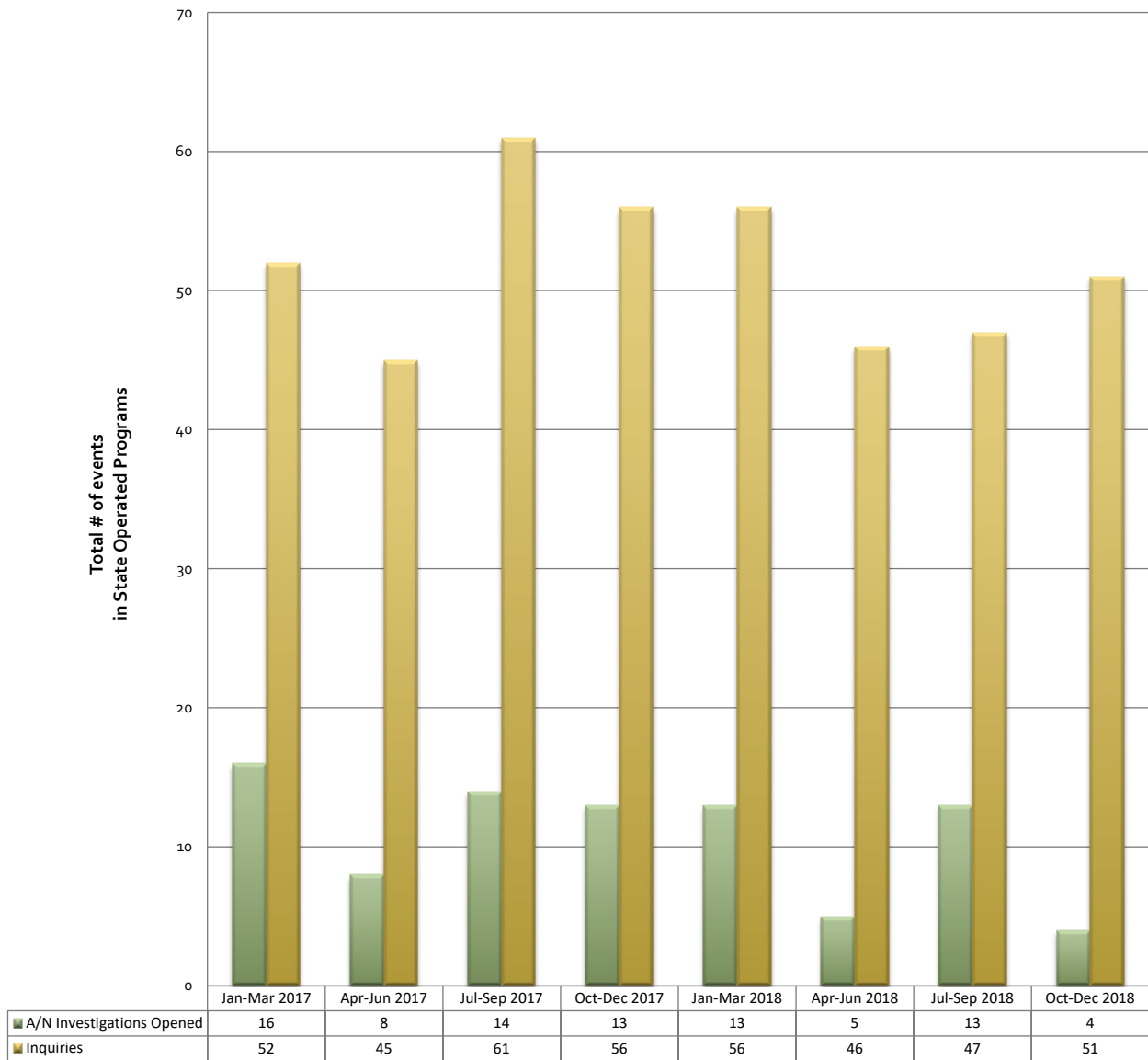
Note: An injury is defined as that which required treatment of more than first aid. State Operated Waiver Programs information now included in community residential data.



	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
# DD Individuals in Community Residential	595	711	702	519	605	729	749	571
# DD Community Individuals with No Injuries	231	402	326	175	235	389	407	233
# DD Community Individuals with Exactly 1 Injury	334	283	345	304	340	297	304	297
# DD Community Individuals with Exactly 2 Injuries	27	20	21	29	26	41	31	32
# DD Community Individuals with 3+ Injuries	3	6	10	11	4	2	7	9



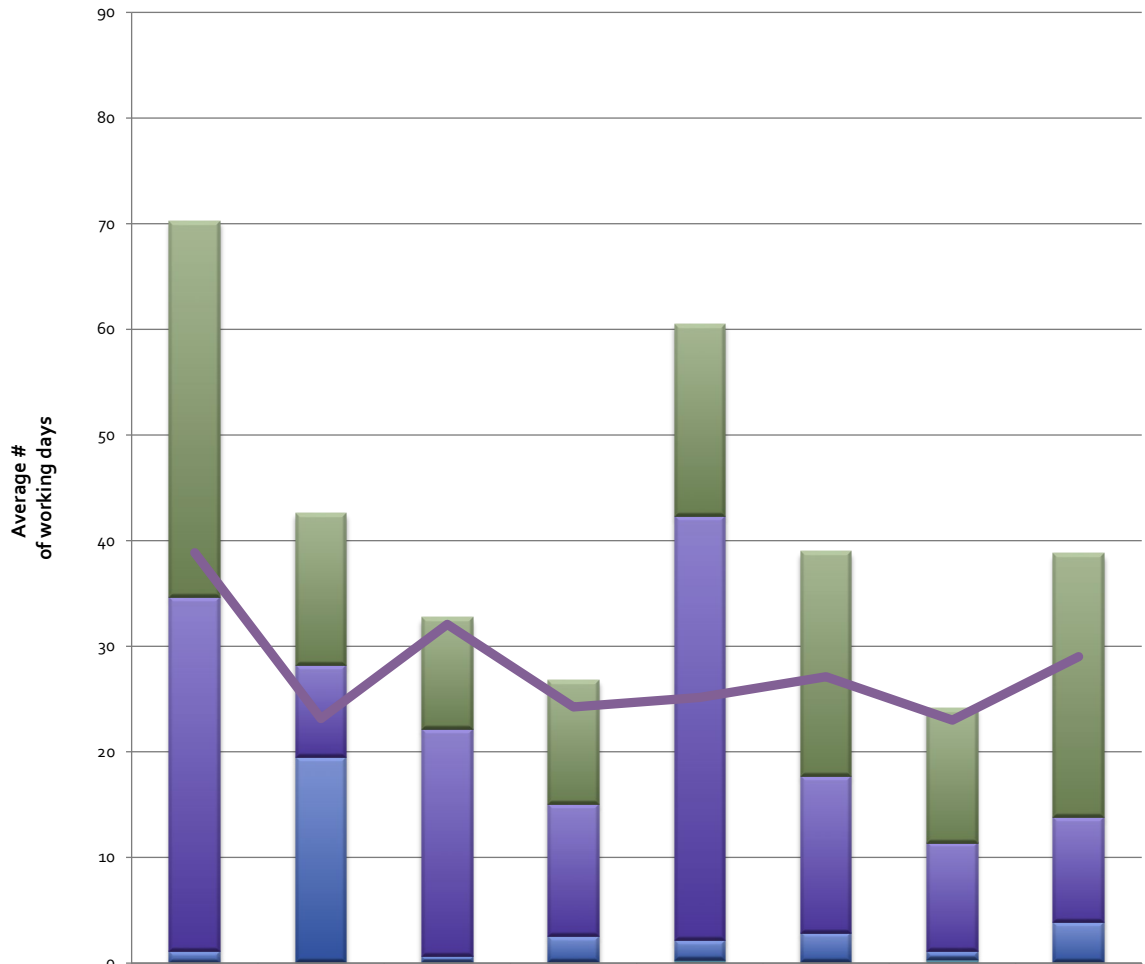
## Division of DD State Operated Programs Inquiries Into Potential Abuse/Neglect Allegations



NOTE: If an event initially had an inquiry but then an A/N investigation, it is counted only as an investigation to ensure an unduplicate dcount of cases under review. Also note that a "decision" for an investigation is only the start of the investigation process. When a final judgment is made regarding an allegation, it is called a "determination". An inquiry is the process of gathering facts surrounding an event, complaint or upon discovery of unknown injury to determine whether the incident or event is suspect for abuse or neglect. This data includes Habilitation Center Campus and State Operated Waiver Programs.



## Duration of Investigation Process State Operated Programs

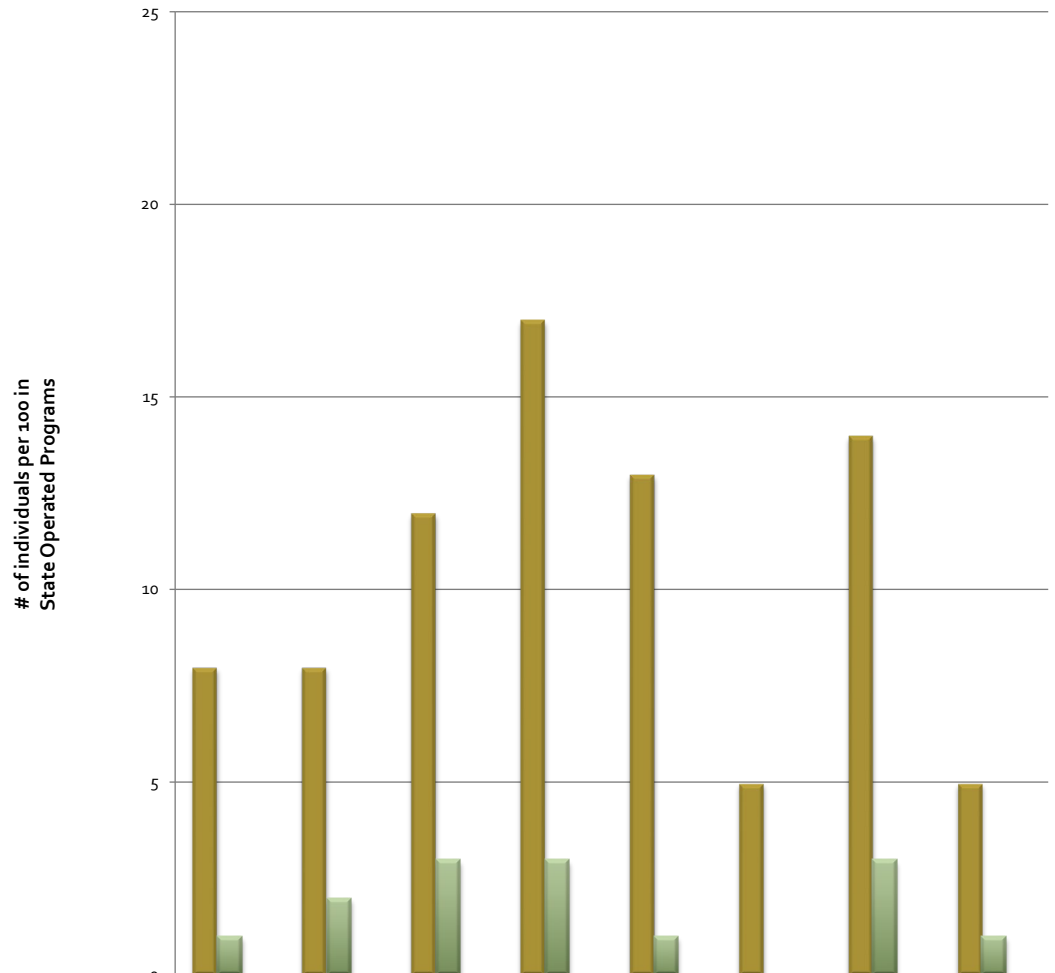


DD State Operated Programs Event Count	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
Inv. Final Report to Final Determ.	35.62	14.43	10.53	11.71	18.17	21.27	12.75	24.93
Inv. Request to Final Report	33.54	8.71	21.53	12.53	40.17	14.82	10.25	9.93
Event Report to Inv. Request	1.13	19.38	0.56	2.43	1.90	2.80	0.83	3.85
Event Discovery to Report	0.00	0.13	0.11	0.14	0.30	0.10	0.33	0.08
Total Time (90%)	38.85	23.14	32.07	24.24	25.14	27.10	23.00	29.00

NOTE: Timelines are divided into four distinct stages of the investigation. The bars show the average duration (in working days) for all final determinations made in each quarter, whereas the line superimposes the overall average duration of 90% of the cases. The 90% is used in order to show a more "typical" timeline excluding outlier cases. This data includes Habilitation Center Campus and State Operated Waiver Programs.



## Division of DD State Operated Programs Abuse and Neglect Completed Investigations/Substantiations

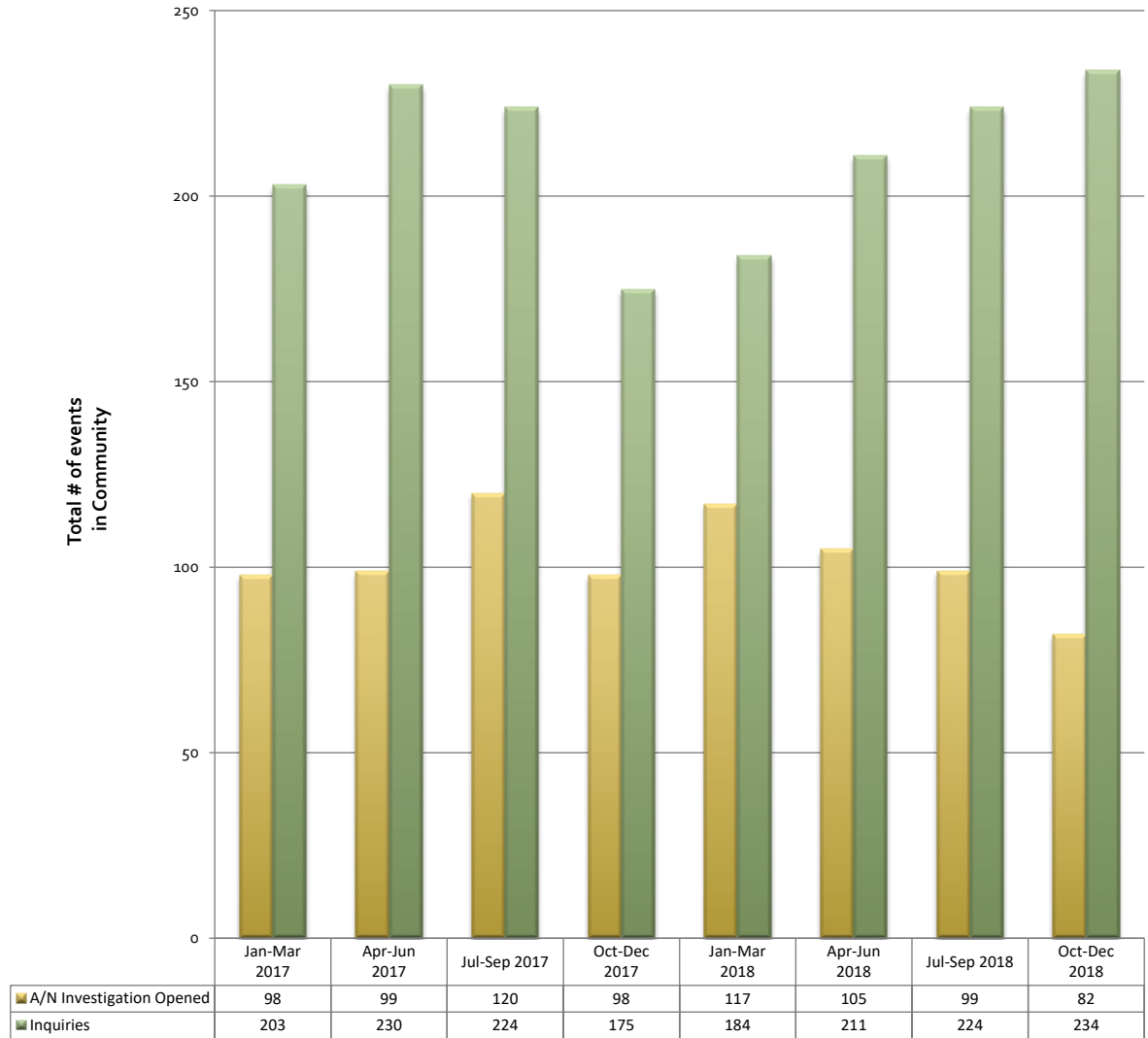


	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
CO Investigations Completed	8	8	12	17	13	5	14	5
A/N Substantiations	1	2	3	3	1	0	3	1
# Individuals in State Operated Programs (Waiver & On Campus)	563	561	556	549	541	539	532	527

NOTE: Investigations and Substantiations are a count of the number of events, not the number of alleged perpetrators or victims. Also, both counts reflect cases finalized in the quarter reported. Process includes both Habilitation Center Campus and Waiver programs.



### Division of DD Community Inquiries Into Potential Abuse/Neglect Allegations

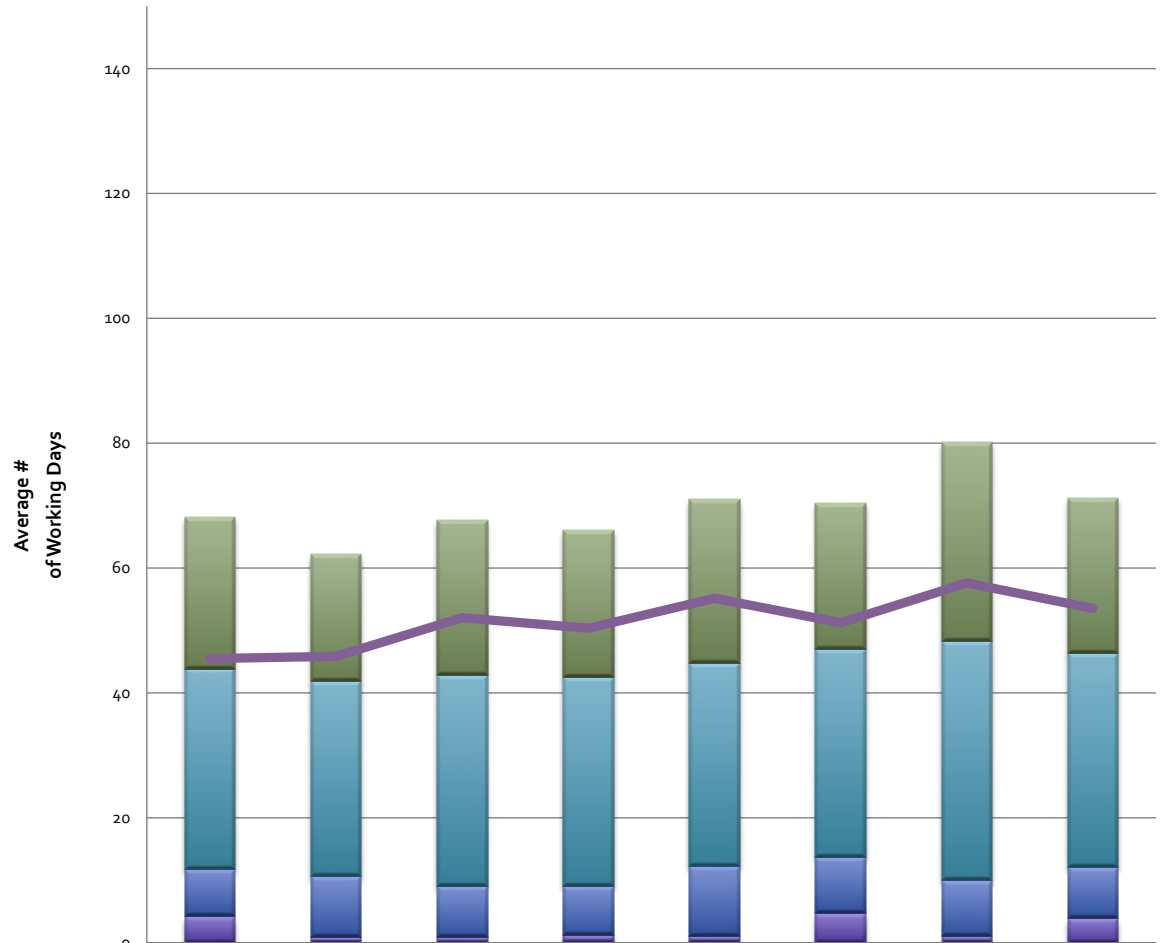


NOTE: If an event initially had an inquiry but then an A/N investigation, it is counted only as an investigation to ensure an unduplicated account of cases under review. Also note that a "decision" for an investigation is only the start of the investigation process. When a final judgment is made regarding an allegation it is called a "determination".

Definition - Inquiry: process of gathering facts surrounding an event, complaint or upon discovery of unknown injury to determine whether the incident or event is suspect for abuse or neglect.



## Duration of Investigation Process DD Community

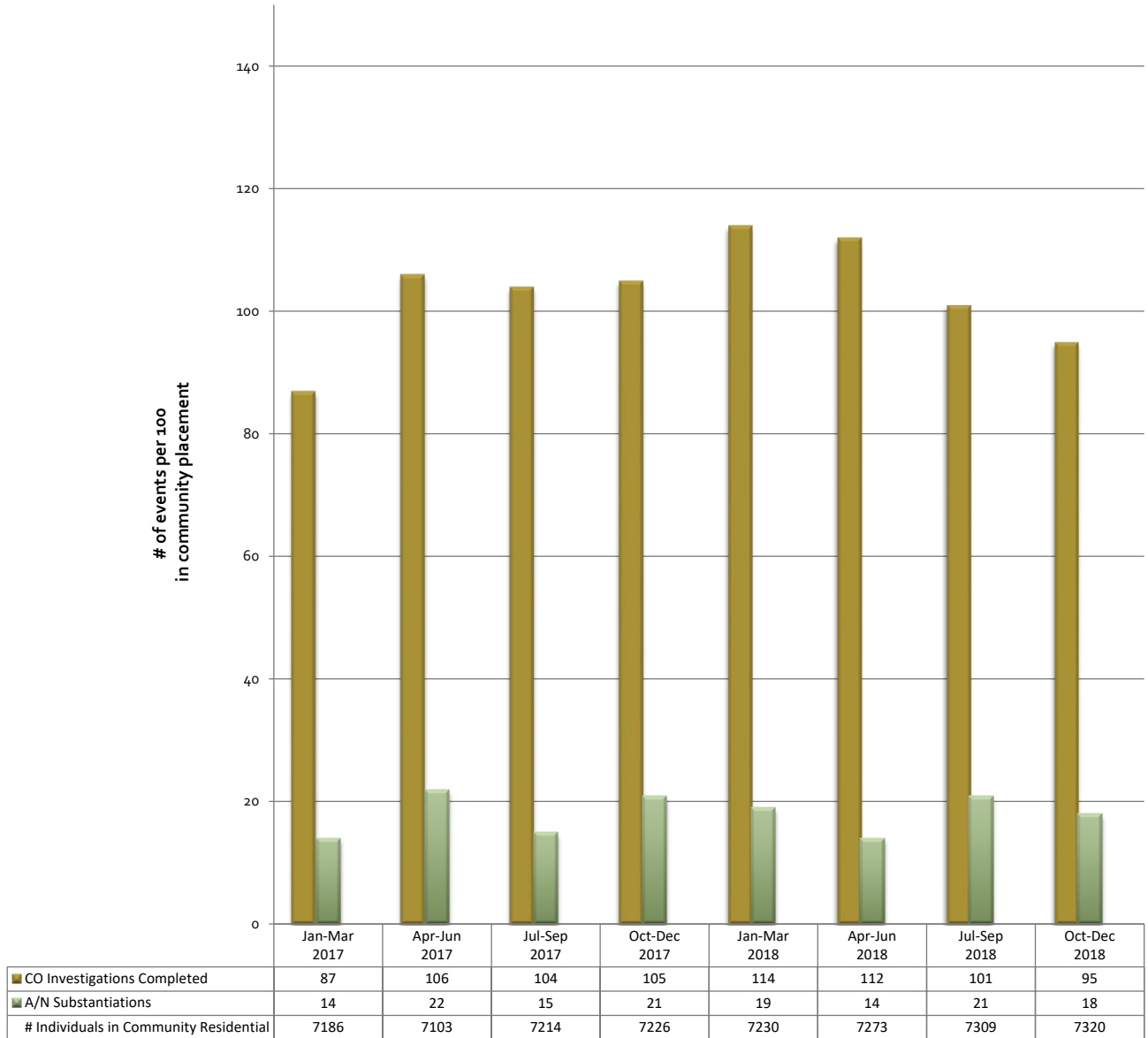


	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
DD Community Event Count	77	99	91	118	97	107	112	100
Inv. Final Report to Final Det.	24.33	20.36	24.92	23.49	26.31	23.50	31.98	24.91
Inv. Request to Final Report	32.13	31.36	33.75	33.55	32.39	33.31	38.34	34.30
Event Report to Inv. Request	7.52	9.62	8.22	7.78	11.34	8.96	8.85	8.13
Event Discovery to Report	4.27	0.98	0.87	1.31	0.99	4.73	1.11	3.95
Total Time (90%)	45.51	45.85	52.07	50.36	55.16	51.24	57.62	53.56

NOTE: Timelines are divided into four distinct stages of the investigation. The bars show the average duration (in working day) for all final determinations made in each quarter, whereas the line superimposes the overall average duration of 90% of the cases. The 90% is used in order to show a more "typical" timeline excluding outlier cases.



## Division of DD Community Abuse and Neglect Investigations

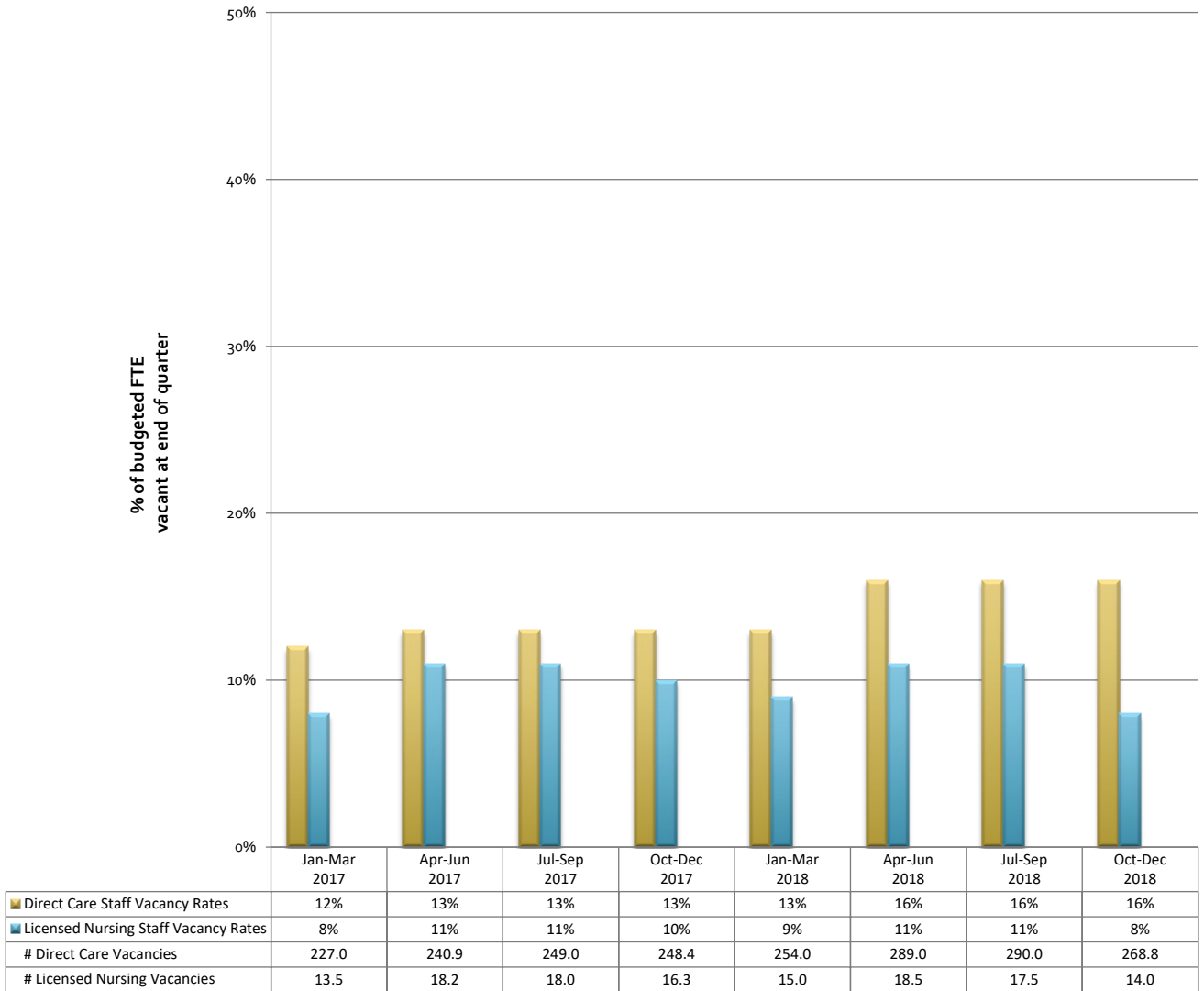


NOTE: Investigations and Substantiations are a count of the number of events, not the number of alleged perpetrators or victims. Also, both counts reflect cases finalized in the quarter reported. Starting in the Jul-Sep 2013 quarter, "# Individuals in Community Residential" excludes individuals receiving services through the State Operated Waiver.





## Division of DD State Operated Programs Staff Vacancy Rates



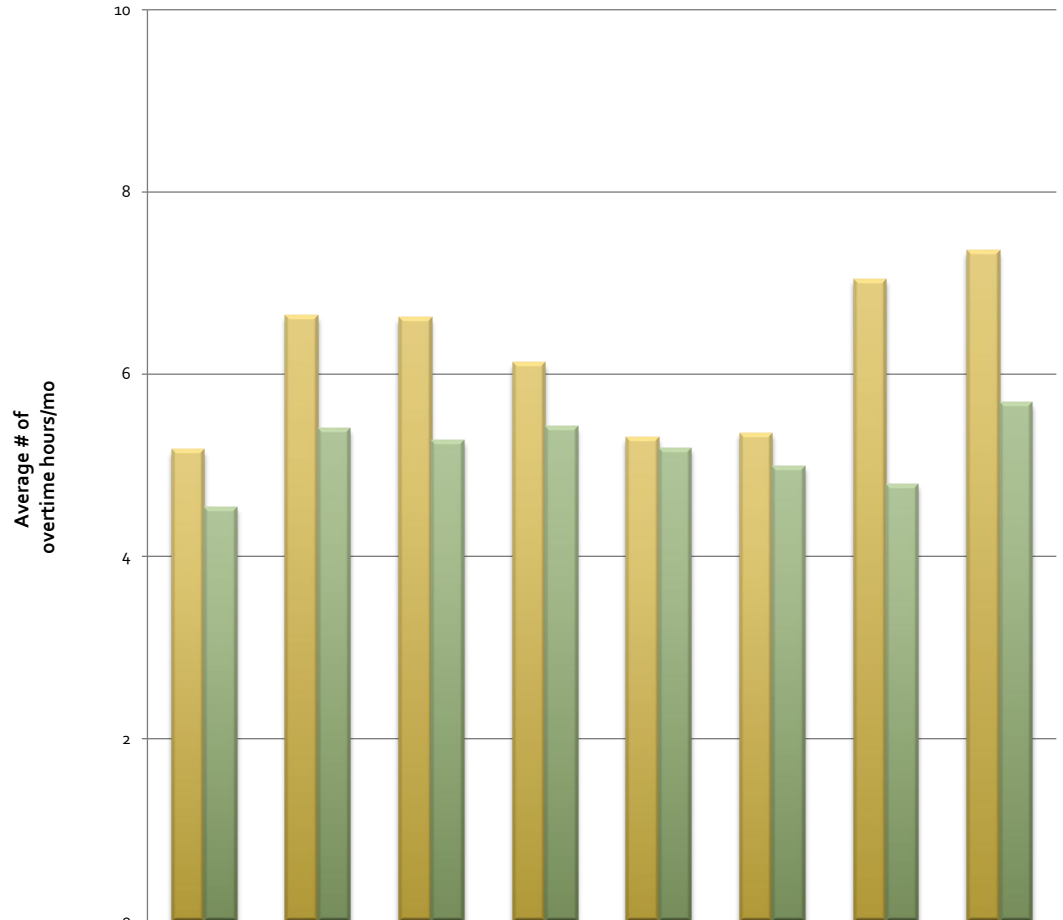
NOTE: Vacancy rates are based upon last day of the month for the quarter. Chart includes Habilitation Center Campus and State Operated Waiver Programs vacancy data.

Definitions: Direct Care - DAI, DAII, DAIII.

Licensed Nursing - Licensed Practical Nurses (LPN) and Registered Nurses (RN).



### Division of DD State Operated Programs Staff Overtime Hours



	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
■ Average # OT Hours Worked Per Active Direct Care Staff/Month	5.17	6.65	6.63	6.13	5.31	5.36	7.05	7.36
■ Average # OT Hours Per Active Licensed Staff/Month	4.54	5.41	5.28	5.43	5.19	5.00	4.80	5.69

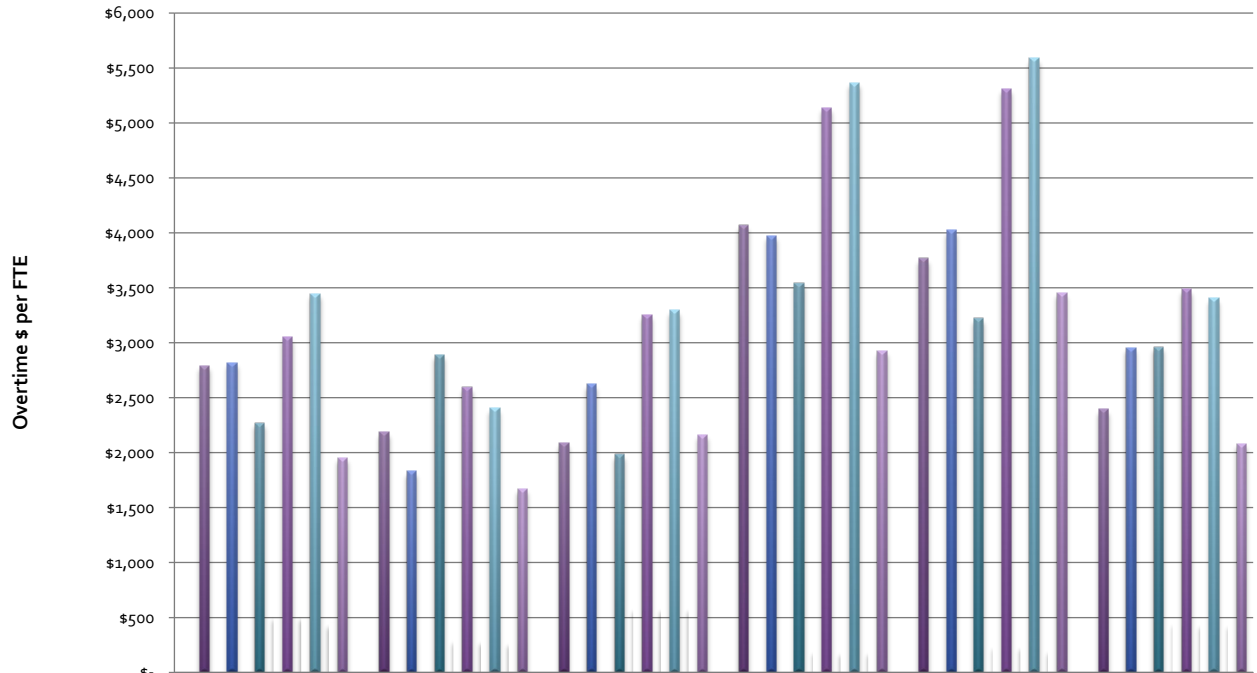
NOTE: Staff noted are active staff. Chart includes Habilitation Center Campus and State Operated Waiver Programs overtime data.  
 Definitions: Direct Care - Developmental Assistant I (DAI), DAII, DAIII.  
 Licensed Nursing: Licensed Practical Nurses (LPN) and Registered Nurses (RN).  
 Method of data collection for this measure was revised for number of staff beginning with Oct-Dec 2018.



## State Operated Programs Overtime Accrued FY 2012-FY 2018 YTD Comparison

Note: Chart includes Habilitation Center Campus and State Operated Waiver Programs overtime data.

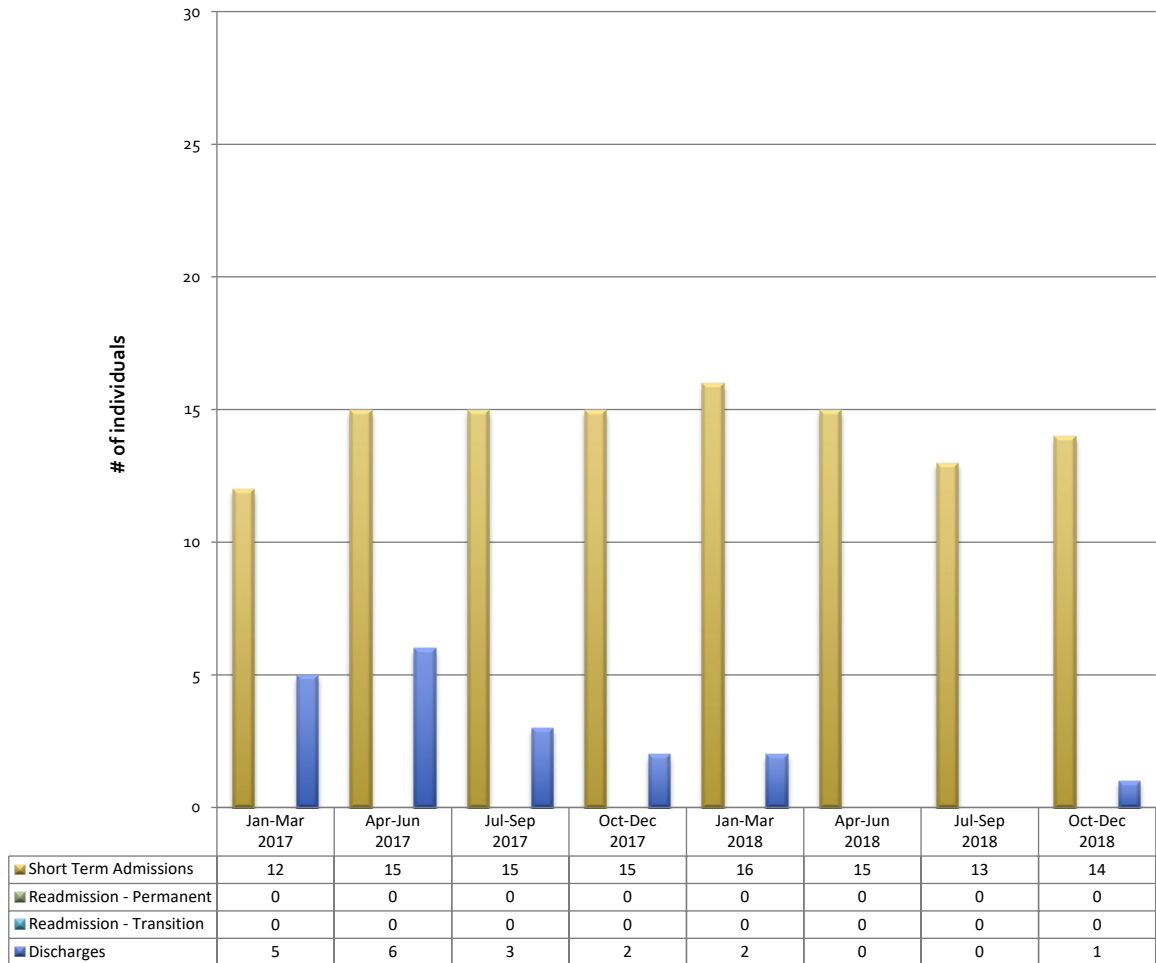
Method of data collection for this measure was revised for number of staff beginning with the Oct-Dec 2018.



	Bellefontaine	Higginsville	NWCS	SWCS	SEMORS	SLDDTC
FY 14 Overtime \$M	\$1.440	\$1.077	\$1.056	\$0.985	\$0.953	\$1.270
FY 14 FTEs	516	493	505	242	253	530
FY 14 OT \$ per FTE	\$2,790.70	\$2,184.58	\$2,091.09	\$4,070.25	\$3,766.80	\$2,396.23
FY 15 Overtime \$M	\$1.466	\$0.882	\$1.209	\$0.866	\$0.994	\$1.518
FY 15 FTEs	520	482	461	218	247	514
FY 15 OT \$ per FTE	\$2,819.23	\$1,829.88	\$2,622.56	\$3,972.48	\$4,024.29	\$2,953.31
FY16 Overtime \$M	\$1.205	\$0.969	\$1.095	\$0.741	\$0.764	\$1.487
FY16 FTEs	531	335	552	209	237	502
FY16 OT \$ per FTE	\$2,269.30	\$2,892.54	\$1,983.70	\$3,545.45	\$3,223.63	\$2,962.15
FY17 Overtime \$M	\$1.572	\$0.794	\$1.931	\$1.064	\$1.343	\$1.612
FY17 FTEs	515	306	594	207	253	462
FY17 OT \$ per FTE	\$3,052.43	\$2,594.77	\$3,250.84	\$5,140.10	\$5,308.30	\$3,489.18
FY18 Overtime \$M	\$1.786	\$0.724	\$1.953	\$1.057	\$1.397	\$1.530
FY18 FTEs	518	301	593	197	250	449
FY18 OT \$ per FTE	\$3,447.88	\$2,405.32	\$3,293.42	\$5,365.48	\$5,588.00	\$3,407.57
FY19 Overtime \$M	\$0.877	\$0.470	\$1.272	\$0.585	\$0.729	\$0.917
FY19 FTEs	449	281	588	200	211	441
FY19 OT \$ per FTE	\$1,953.23	\$1,672.60	\$2,163.27	\$2,925.00	\$3,454.98	\$2,079.37



## Division of DD State Operated Programs Short Term Admissions, Readmissions and Discharges



**Short Term:** Total number of individuals admitted to SOP from any Community Provider for medical and/or behavioral short term support with intention of returning back to their home in the community. Note: 100% of the days a crisis bed was available. Crisis bed services are provided in both Habilitation Center Campus and State Operated Waiver Program settings.

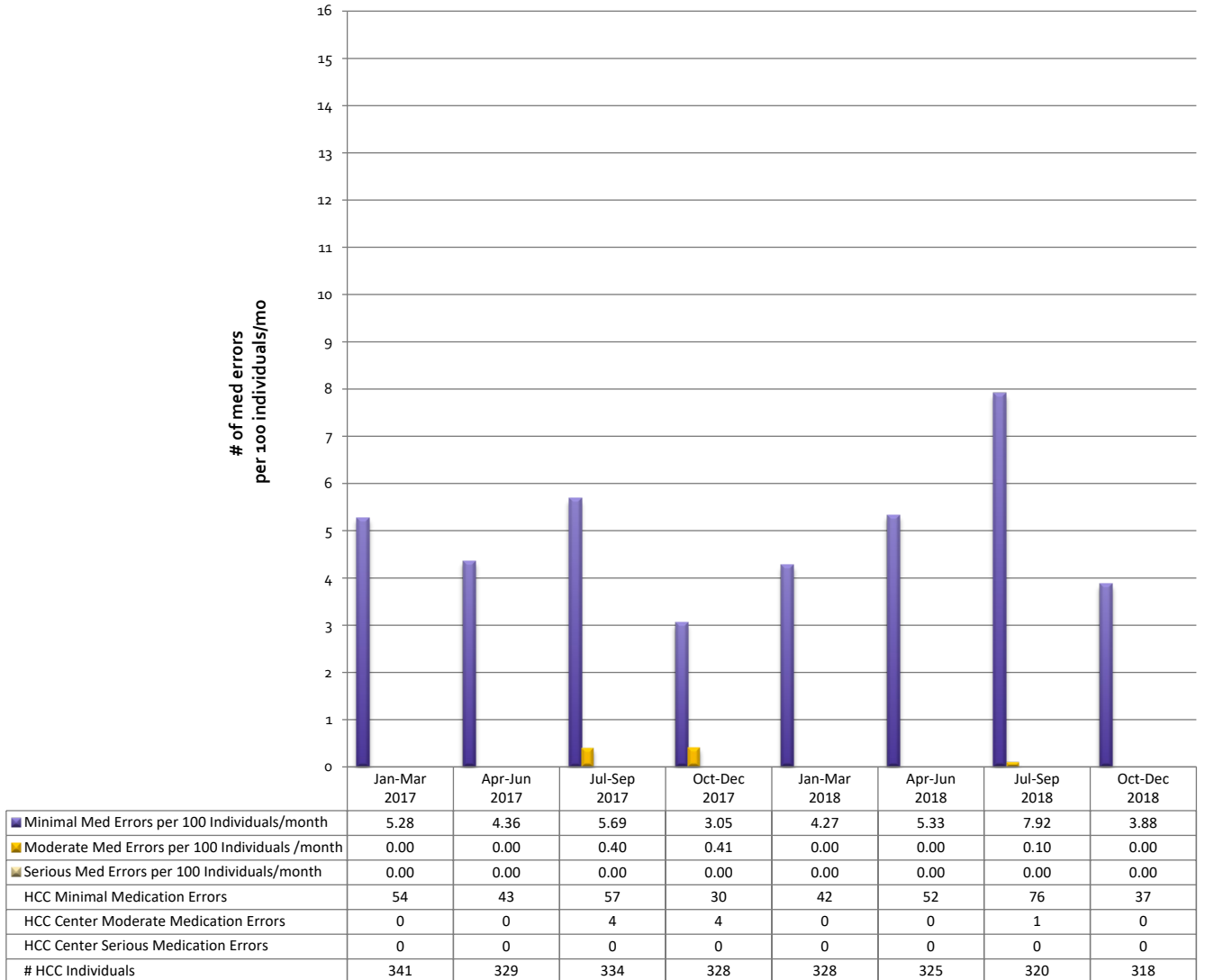
**Permanent:** Total number of individuals previously discharged from the Habilitation Center Campus within the last 12 months that returned during report period with no plans to move back to community.

**Transition:** Total number of individuals, previously discharged from the Habilitation Center Campus within the past 90 days, that returned during report period as part of transition plan for medical and/or behavioral support and are expected to return to their home in the community.

**Discharges:** Total number of individuals who lived on the Habilitation Center Campus and transitioned to community waiver providers or who were discharged to other settings during the reporting period.



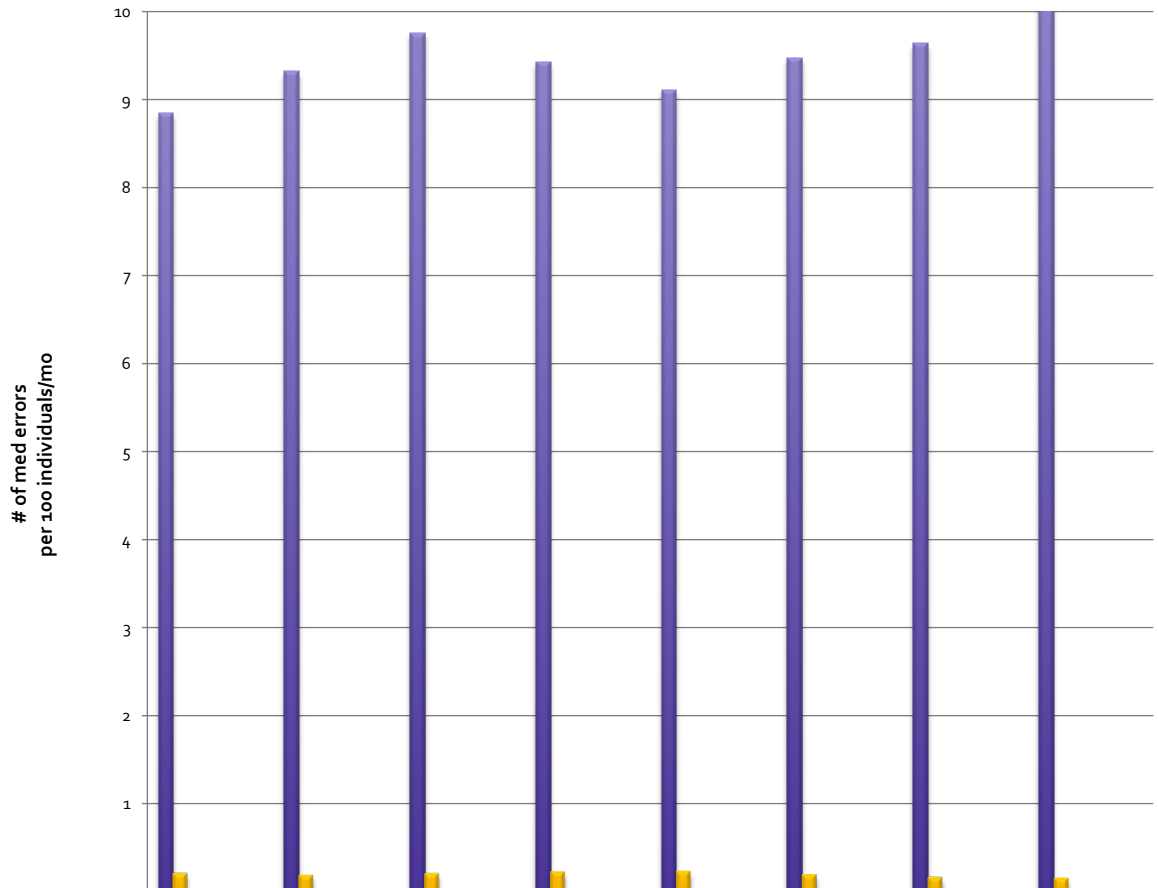
## Division of DD Habilitation Center Campus Medication Errors



Definition of med error: "Minimal"- no or minimal adverse consequences and no treatment or other interventions other than monitoring or observation. "Moderate" - is short term reversible adverse consequences and receives treatment and/or intervention in addition to monitoring. "Serious"- life threatening and/or permanent adverse consequences.  
 NOTE: Beginning reporting period July-Sep 2013, data represents individuals from Habilitation Center Campus (HCC) sites. State Operated Waiver Programs data is reflected in community data tables.



## Division of DD Community Medication Errors

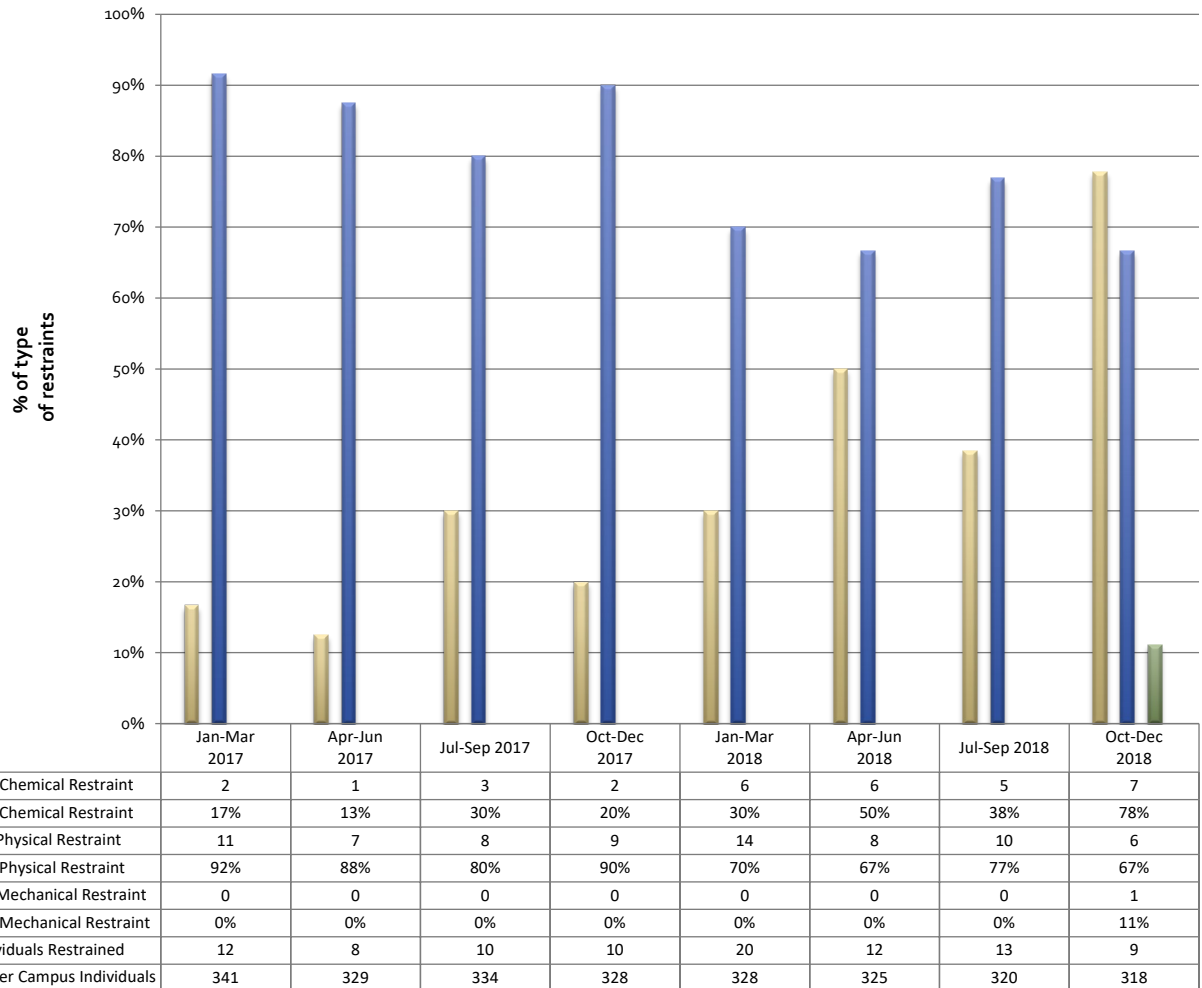


	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
Minimal Med Errors per 100 Individuals/month	8.85	9.32	9.76	9.43	9.11	9.47	9.64	10.12
Moderate Med Errors per 100 Individuals/month	0.21	0.19	0.21	0.23	0.23	0.20	0.17	0.16
Serious Med Errors per 100 Individuals/month	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Community Minimal Medication Errors	1967	2078	2178	2106	2036	2129	2177	2287
Community Moderate Medication Errors	46	42	46	51	52	44	38	36
Community Serious Medication Errors	0	0	0	1	0	0	1	4
# Individuals in Community Residential	7409	7432	7437	7445	7448	7490	7525	7533

Definitions of med errors: "Minimal" - no or minimal adverse consequences and no treatment or interventions other than monitoring or observation. "Moderate" - short term or reversible adverse consequences and receives treatment and/or intervention in addition to monitoring. "Serious" - life threatening and/or permanent consequences.  
 NOTE: Beginning reporting period Jul-Sep 2013, data will also include information from State Operated Waiver Programs (SOWP)



## Division of DD Habilitation Center Campus Use of Restraints



**NOTE:** Each individual who experienced at least one chemical, physical, mechanical restraint is counted so duplication occurs. For example, one individual may experience a chemical restraint and a physical restraint. They are counted in both categories.

Percentage of each type of restraint is based on total number of people restrained for the quarter. Beginning reporting period July-Sep 2013, data represents individuals from Habilitation Center Campus (HCC) sites.

**Chemical Restraint:** A medication used to control behavior or to restrict the individual's freedom of movement and is not a standard treatment for the person's medical or psychiatric condition. A chemical restraint would put an individual to sleep or render them unable to function as a result of the medication.

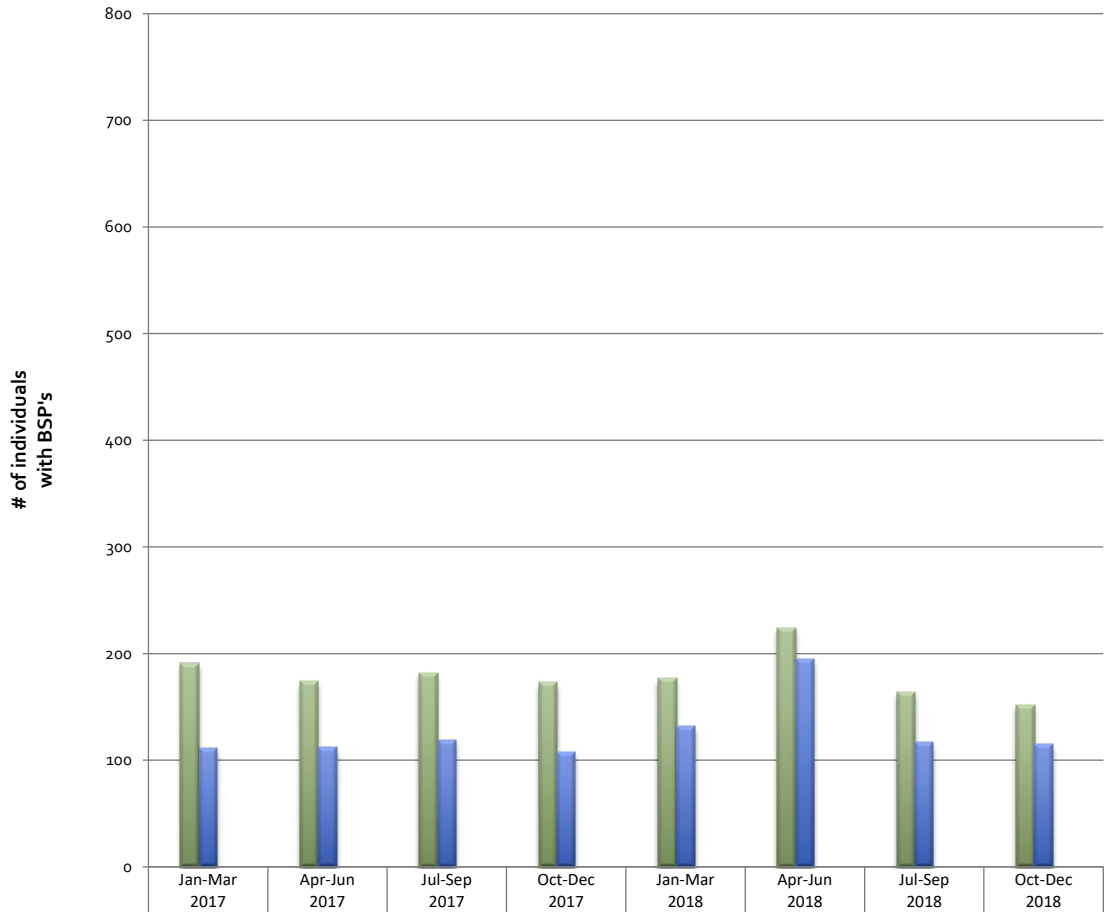
**Physical Restraint:** Any physical hold involving a restriction of an individual's voluntary movement.

**Mechanical restraint:** Any device, instrument or physical object used to confine or otherwise limit an individual's freedom of movement that he/she cannot easily remove.

**# Restrained:** Distinct count of individuals (long term, on campus only) who experienced at least one restraint (chemical, physical, and/or mechanical) during the quarter for behavioral reasons, no medical immobilization, no medical procedures.



## Division of DD Habilitation Center Campus Individuals with Behavior Support Programs



	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
# Hab Center Campus Individuals	341	329	334	328	328	325	320	318
■ Individuals with Behavior Support Programs	191	174	182	173	177	224	164	152
■ Individuals Progressing with Behavior Support Programs	111	112	119	108	132	195	117	115
% On Behavior Support Programs	56%	53%	54%	53%	54%	69%	51%	48%
% Progressing on Behavior Support Programs	58%	64%	65%	62%	75%	87%	71%	76%

NOTE: Individuals placed on Behavior Support Programs (BSP's) may be those who have been prescribed medication for a psychiatric disorder or who exhibit behaviors that interfere with their level of functioning. Number is based on average for the quarter.

Definition - Individuals with BSP's: Individuals with an individualized plan of behavior analytic procedures developed to systematically address skills or behaviors to be learned and behaviors to be reduced or eliminated.

Definition - Consumers progressing with BSP's: Individuals who are at baseline or below for their targeted behaviors identified in their BSP.

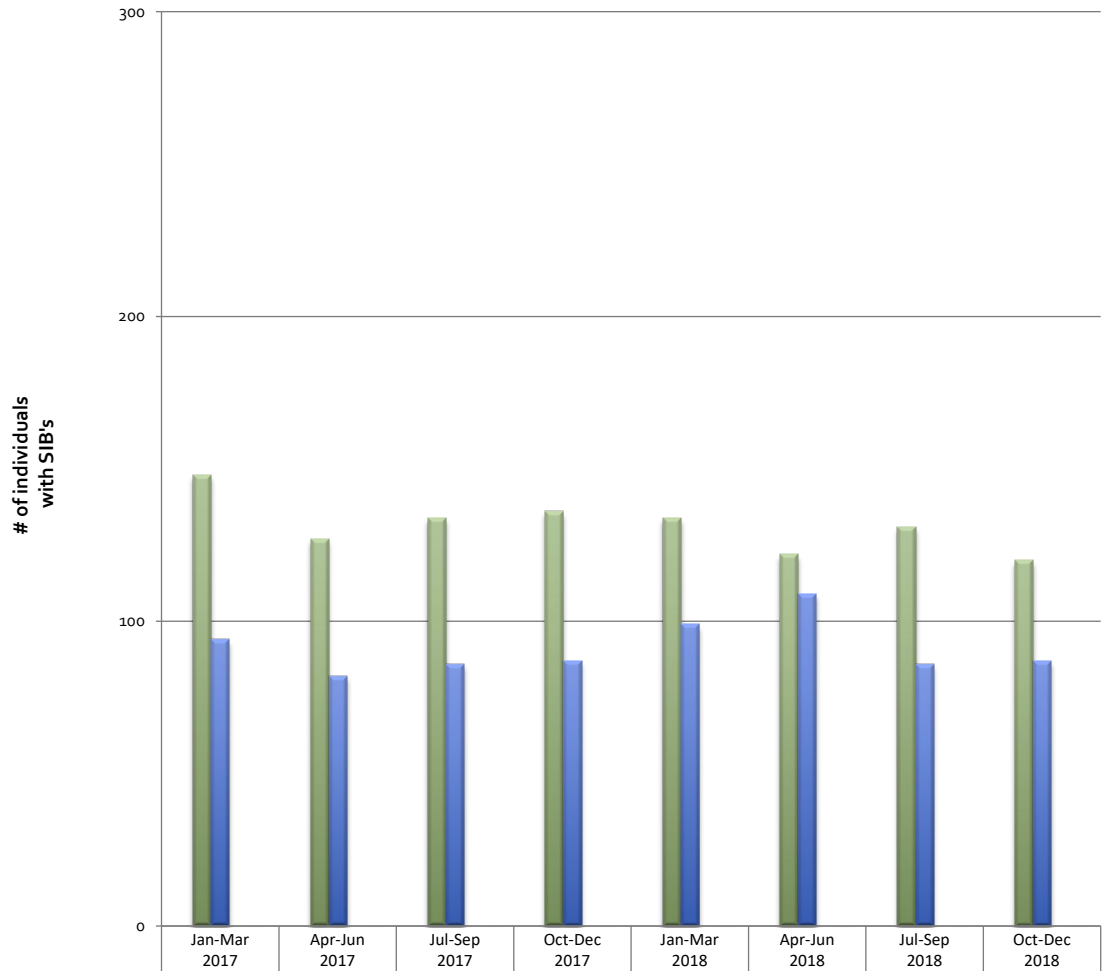
Beginning reporting period July-Sep 2013, data represents individuals from Habilitation Center Campus (HCC) sites.

Note the transition to off-campus for MHC becoming NWCS Jan-Mar 2016.





## Division of DD Habilitation Center Campus Individuals with Self Injurious Behavior (SIB) Programs



	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
# Hab Center Campus Individuals	341	329	334	328	328	325	320	318
■ Individuals with Self Injurious Behavior Programs	148	127	134	136	134	122	131	120
■ Individuals Progressing with SIB Programs	94	82	86	87	99	109	86	87
% on Self Injurious Behavior Programs	43%	39%	40%	41%	41%	38%	41%	38%
% Progressing on Self Injurious Behavior Programs	64%	65%	64%	64%	74%	89%	66%	73%

Definition- Self Injurious Behavior Program: A individual with a Behavior Support Program that includes a program developed to systematically reduce or eliminate Self Injurious Behaviors (incidents of self harm) such as slapping self in the face, biting self on hand, or banging own head.

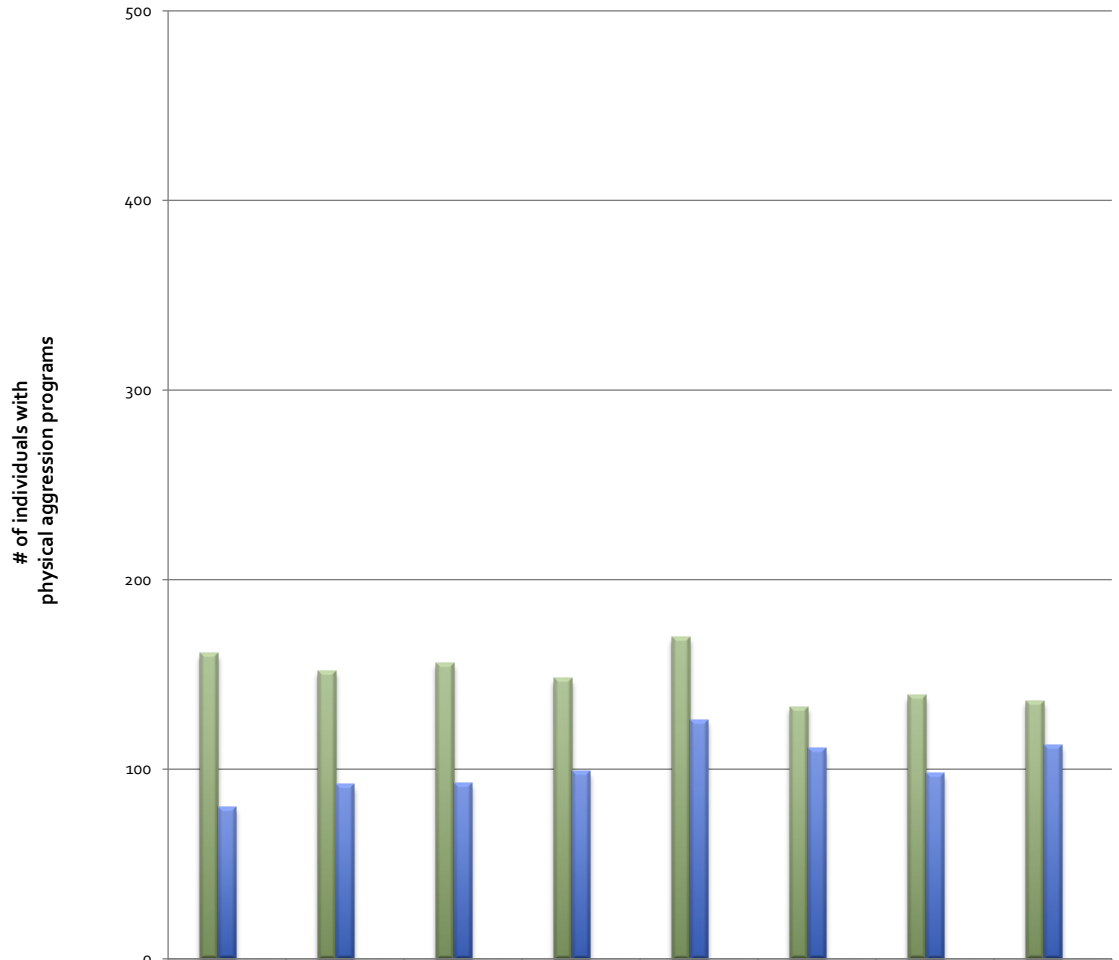
Definition- Progressing with Self Injurious Behavior Programs: An individual who is at baseline or below for their Self Injurious Behavior Program.

Beginning reporting period July-Sep 2013 , data represents individuals from Habilitation Center Campus (HCC) sites.

Note the transition to off-campus for MHC becoming NWCS Jan-Mar 2016



## Division of DD Habilitation Center Campus Individuals with Physical Aggression Programs



	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Oct-Dec 2017	Jan-Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018
# Hab Center Campus Individuals	341	329	334	328	328	325	320	318
■ Individuals with Physical Aggression Programs	161	152	156	148	170	133	139	136
■ Individuals Progressing with Physical Aggression Programs	80	92	93	99	126	111	98	113
% on Physical Aggression Programs	47%	46%	47%	45%	52%	41%	43%	43%
% Progressing on Physical Aggression Programs	50%	61%	60%	67%	74%	83%	71%	83%

Definition - Physical Aggression Programs: Individuals with a Behavior Support plan that includes a program designed to reduce or eliminate Physical Aggression (such as hitting, kicking, throwing objects, biting) towards another person.

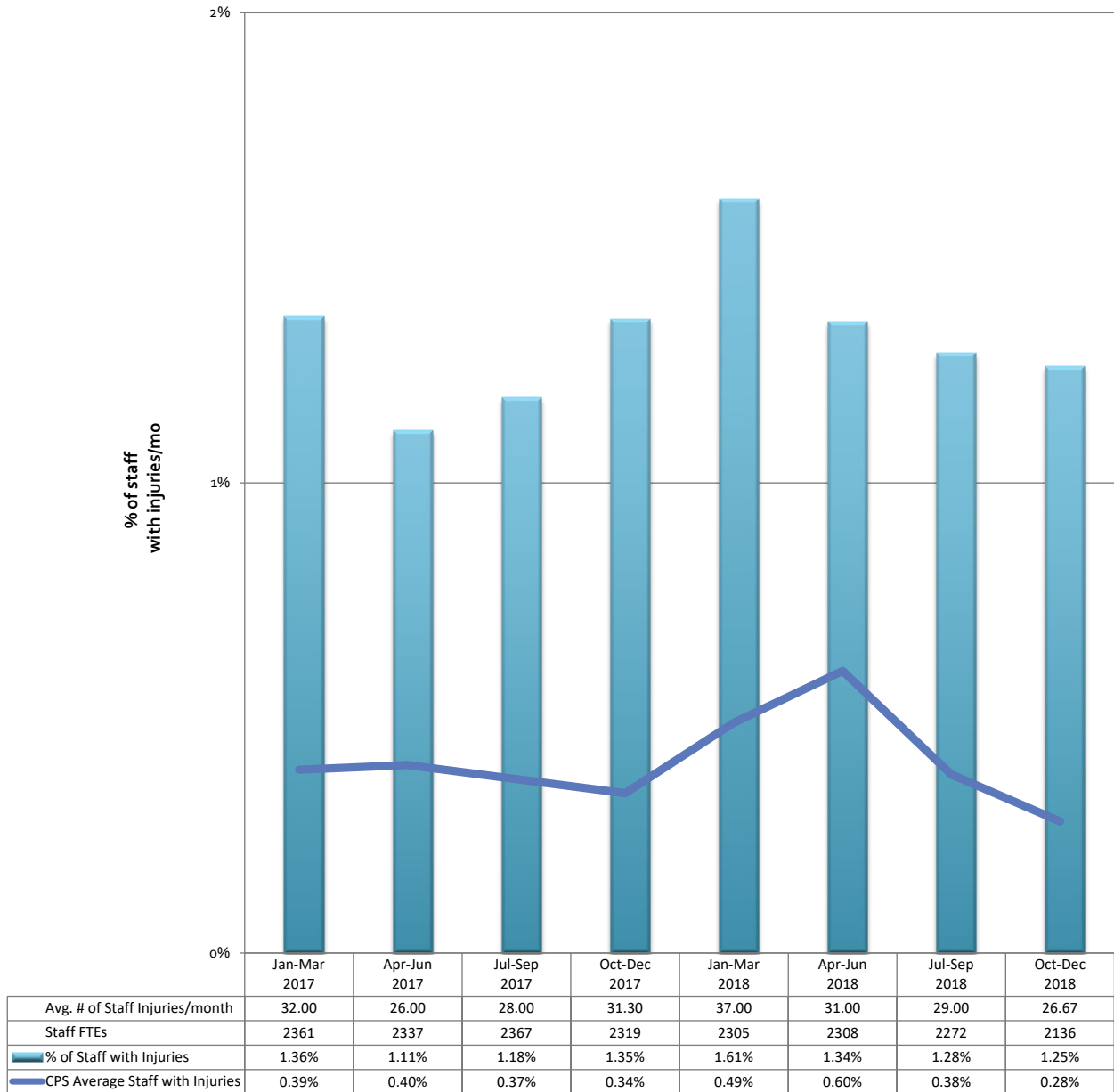
Definition - Progressing with Physical aggression programs: Individuals who are at baseline or below for their Physical Aggression program.

Beginning reporting period July-Sep 2013, data represents individuals from Habilitation Center Campus (HCC) sites.

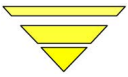
Note the transition to off-campus for MHC becoming NWCS Jan-Mar 2016



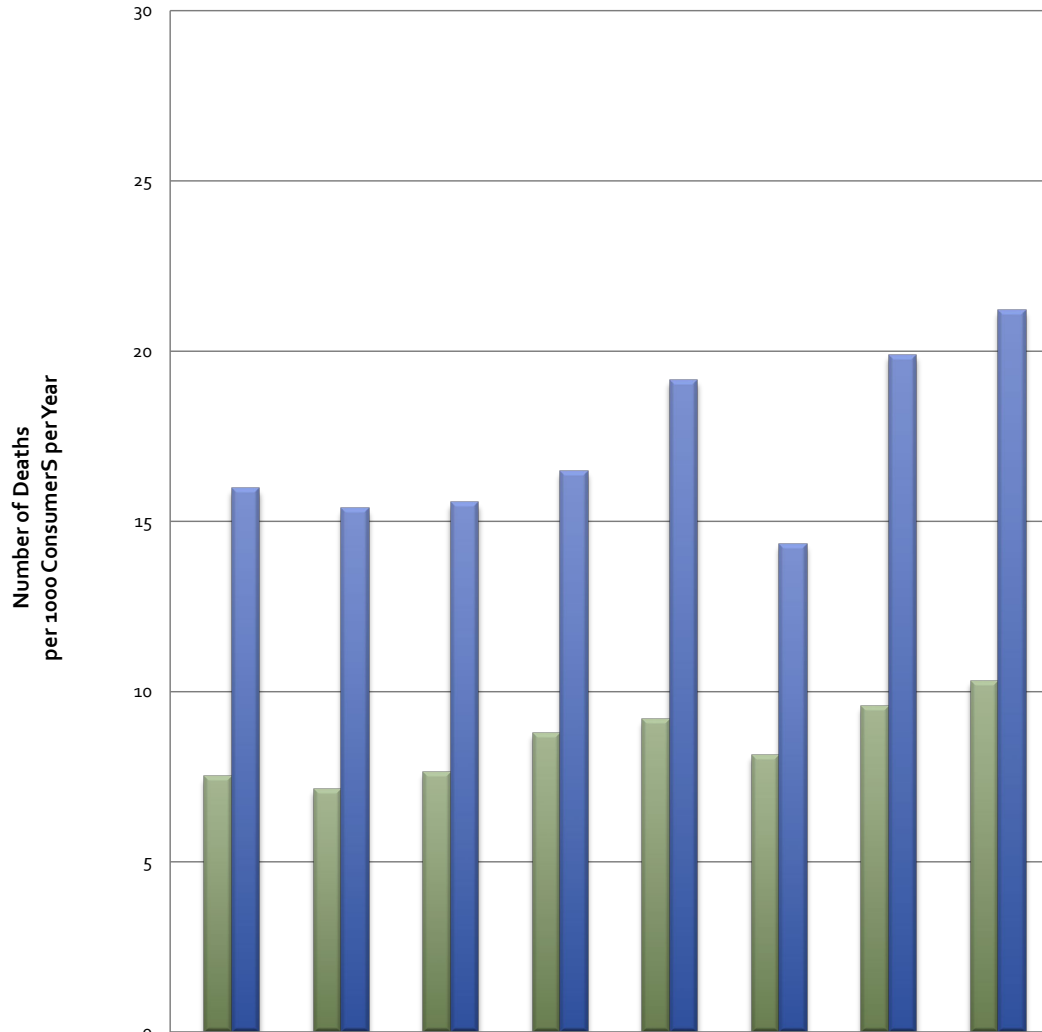
## Division of DD State Operated Programs Staff Injuries



Definition: Total number of different employees who experienced at least one injury requiring medical treatment or hospitalization.  
 NOTE: Chart includes both Habilitation Center Campus and State Operated Waiver Programs staff data.

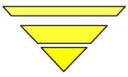


## DD Mortality Rate in Community

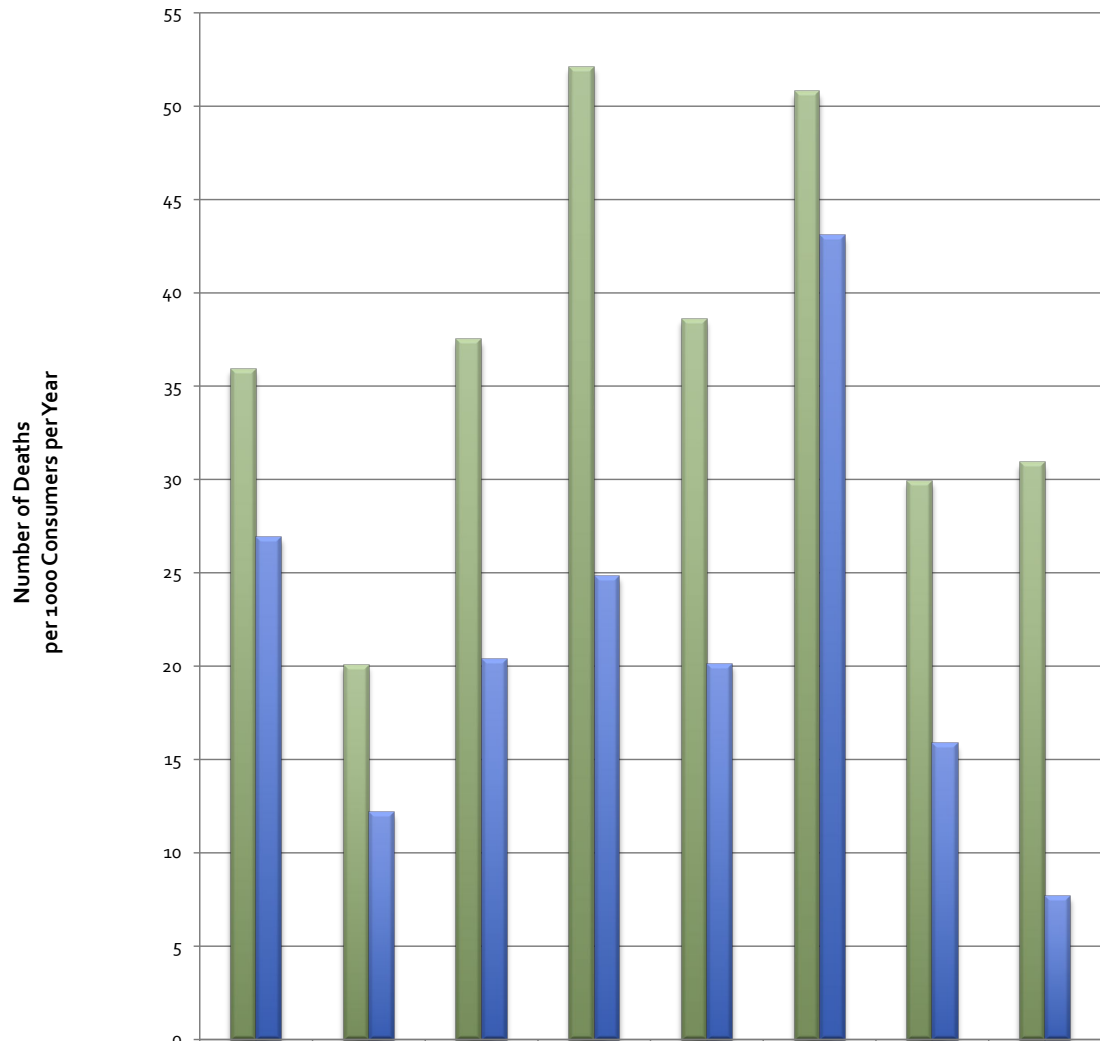


	FY11	FY 12	FY 13	FY14	FY15	FY16	FY17	CY18
DD Community Consumer Deaths	243	239	265	297	318	292	357	407
DD Community Crude Mortality / 1000	7.51	7.15	7.64	8.80	9.19	8.15	9.57	10.32
Missouri Vital Statistics Crude Mortality / 1000	9.20	9.30	9.3	9.5	9.6	9.8	10.1	
DD Community Age Adjusted Mortality / 1000	15.97	15.38	15.56	16.49	19.15	14.35	19.90	21.22
Missouri Vital Statistics Age Adj Mortality / 1000	8.1	8.0	8.1	8.0	8.2	8.1	8.20	

NOTE: Deaths reported for consumers receiving community services. Per 1000 client years compares to the Missouri community mortality rate of 10.1 deaths per 1000 Missouri residents (2017 MO Vital Statistics). Age adjusted mortality rate and crude mortality rate not available from Missouri Vital Statistics as of 1-31-19. For FY18 the Division started utilizing calendar year data to initiate time period equivalence. Previous to CY18, data from Vital Statistics calendar year was reported in conjunction with data from the Division's fiscal year.

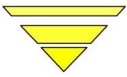


## DD Mortality Rate in Habilitation Centers

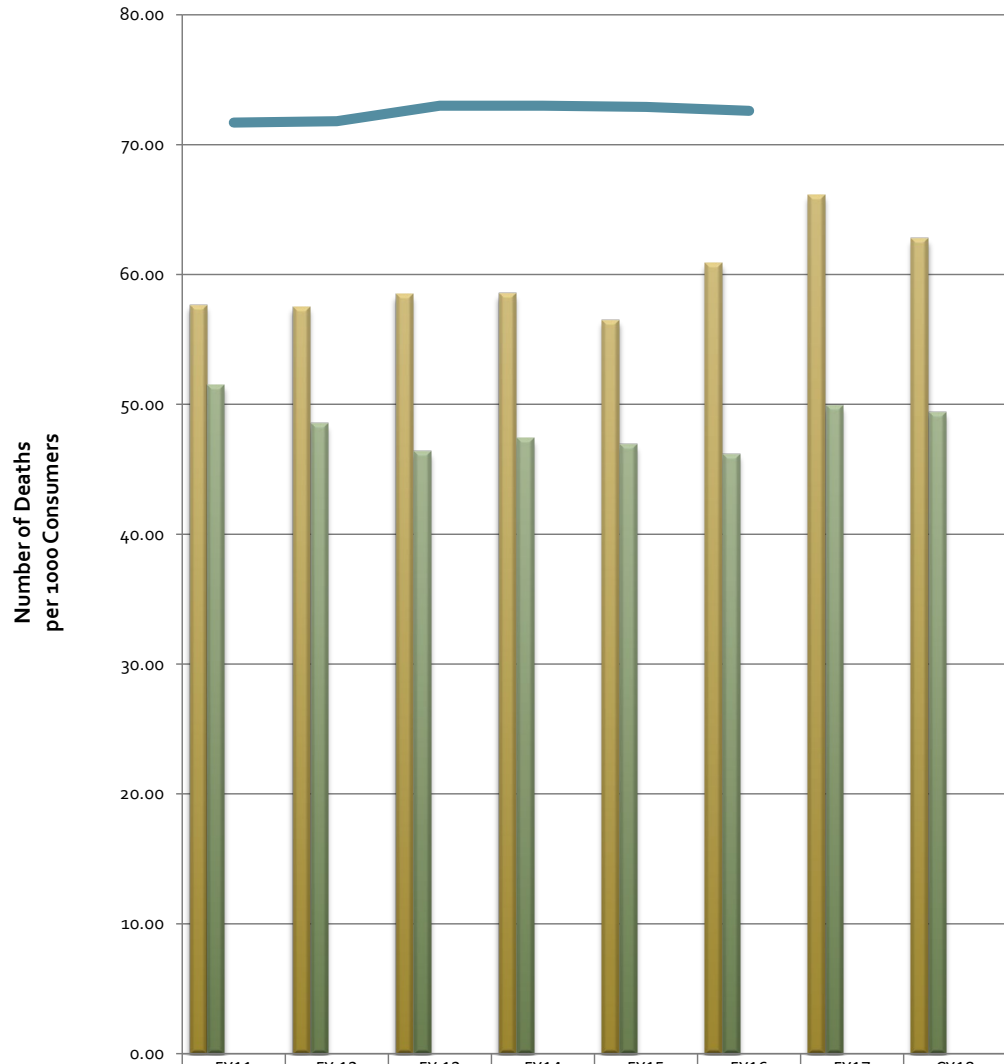


	FY11	FY 12	FY 13	FY14	FY15	FY16	FY17	CY18
DD State Operated Programs (SOP) Deaths	15	17	26	34	21	28	17	10
■ DD State Operated Programs Crude Mortality / 1000	35.93	20.07	37.51	52.12	38.59	50.79	29.93	30.92
Missouri Vital Statistics Crude Mortality / 1000	9.20	9.30	9.3	9.5	9.6	9.8	10.1	
■ DD SOP Age Adj Mortality / 1000	26.93	12.19	20.37	24.85	20.12	43.08	15.86	7.69
Missouri Vital Statistics Age Adj Mortality / 1000	8.1	8.0	8.1	8.0	8.2	8.1	8.20	

**NOTE:** Deaths reported for consumers residing in Habilitation Centers. Per 1000 client years compares to the Missouri community mortality rate of 10.1 deaths per 1000 Missouri residents (2017 MO Vital Statistics). Age adjusted mortality rate and crude mortality rate not available from Missouri Vital Statistics as of 1-31-19. For FY18 the Division started utilizing calendar year data to initiate time period equivalence. Previous to CY18, data from Vital Statistics calendar year was reported in conjunction with data from the Division's fiscal year.



## DD Average Age At Death



DD Avg. Age at Death - State Operated Programs	FY11	FY 12	FY 13	FY14	FY15	FY16	FY17	CY18
DD Average Age at Death - Community	51.48	48.53	46.38	47.37	46.91	46.17	49.91	49.43
Number of Deaths - All DD	261	256	291	331	339	320	374	417
Number of Deaths - State Operated Programs	29	15	26	34	21	28	17	10
Number of Deaths - Community	243	239	265	297	318	292	357	407
Average Age at Death - Missouri Vital Statistics	71.70	71.8	73	73	72.9	72.6		

NOTE: Deaths reported for all DD State Operated Programs and community consumers. All Missouri average is calculated from the "Missouri Vital Statistics (2017-2018 not yet available as of 1-31-19). In FY18 the Division started utilizing calendar year data to initiate time period equivalence. Previous to CY18, data from Vital Statistics calendar year was reported in conjunction with data from the Division's fiscal year. Average age of death is not published for singular years by the Department of Vital Statistics starting in 2017.