



Evidence-based Intervention Programs

2010 Outcomes Summary

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Prevention Research Center
FOR THE PROMOTION OF HUMAN DEVELOPMENT



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Introduction

The Evidence-based Prevention and Intervention Support Center (EPISCenter) was tasked with collecting quarterly Performance Measure data from all **Multidimensional Treatment Foster Care (MTFC)**, **Multisystemic Therapy (MST)**, and **Functional Family Therapy (FFT)** program providers who are funded through Special Grant funds from the Pennsylvania Department of Public Welfare's Office of Children Youth and Families, PCCD grants, or Medical Assistance. The data collected and submitted to the EPISCenter represent all teams providing service under these programs, and includes all youth in the program regardless of funding source. The goal of quarterly and annual reports is to provide data on the functioning and impact of these evidence-based programs in Pennsylvania.

The information in this report presents the highlights from four quarters of reporting which cover the period January 1, 2010 through December 31, 2010 (the third and fourth quarters of the 2009–2010 fiscal year and the first and second quarters of the 2010–2011 fiscal year). Data for this report were submitted by MTFC, MST, and FFT providers across Pennsylvania¹. Data are presented by quarter and for the 2010 calendar year.

Multidimensional Treatment Foster Care

Multidimensional Treatment Foster Care (MTFC) is a treatment alternative to group or residential treatment and incarceration for youth who have problems with chronic disruptive behavior. Youth are placed in a family setting for six to nine months during which time the youth and his/her identified aftercare family receive treatment from a team consisting of a program supervisor, a family therapist, an individual therapist, a child skills trainer, a daily telephone contact person/treatment parent trainer/recruiter, and treatment parents. The treatment parents are recruited, trained, and supported as an essential part of the treatment team. Treatment parents provide mentoring, a supervised and structured home environment, effective behavior management, and daily feedback to the rest of the team regarding the youth's behavior.

¹ See the Appendix for a table that lists all MTFC, MST, and FFT providers and the reporting periods for which they submitted data included in this report.

MTFC Population Served

	Jan. 1– March 31, 2010	April 1– June 30, 2010	July 1– Sept. 30, 2010	Oct. 1– Dec. 30, 2010	Total
<i>Number of Providers Reporting</i>	7	6	5	5	7
Youth Served					
Total number of new youth enrolled	16	10	8	11	45
% of youth enrolled who were at imminent risk of being placed in a more restrictive setting prior to treatment	81%	50%	88%	82%	76%
Total number of youth served (new and previously enrolled cases)	25	30	22	18	54 ²
Total number of new parents/caregivers served	32	26	21	17	96
Referral Source					
% of referrals from CYS	73%	30%	67%	64%	60%
% of referrals from Schools	0%	0%	0%	0%	0%
% of referrals from JPO	27%	70%	33%	36%	40%
% of referrals from Other	0%	0%	0%	0%	0%

MTFC Population Served

- A total of 54 youth and 96 parents/caregivers were served in 2010.
- A total of 45 new youth were admitted to MTFC in 2010, 34 (76%) of whom were at imminent risk of being placed in a more restrictive setting prior to treatment according to the provider.
- All referrals for youth admitted to MTFC were made by county agencies. Overall, 60% of referrals came from Children & Youth Services and 40% came from Juvenile Probation.

² Total number of youth served is the sum of the number of youth served by MTFC during the quarter Jan. 1–March 31, 2010, including those enrolled prior to the start of the quarter, and all new youth enrolled during subsequent quarters.

MTFC Discharged Youth

	Jan. 1– March 31, 2010	April 1– June 30, 2010	July 1– Sept. 30, 2010	Oct. 1– Dec. 30, 2010	Total
Total number of youth discharged ³	7	12	11	4	34
% of youth successfully discharged	43%	67%	82%	25%	62%
% of youth unsuccessfully discharged	57% ⁴	17%	18%	50%	29%
% of youth administratively withdrawn ⁵	Not collected	16%	0%	25%	9%
% of youth placed in a residential facility	0%	17%	18%	50%	18%
Average length of stay (in months) for youth successfully discharged	7.4	9.8	8.5	6	8.7
Average length of stay (in months) for youth unsuccessfully discharged	5.8	1.5	3.7	3	4.0

MTFC Discharged Youth:

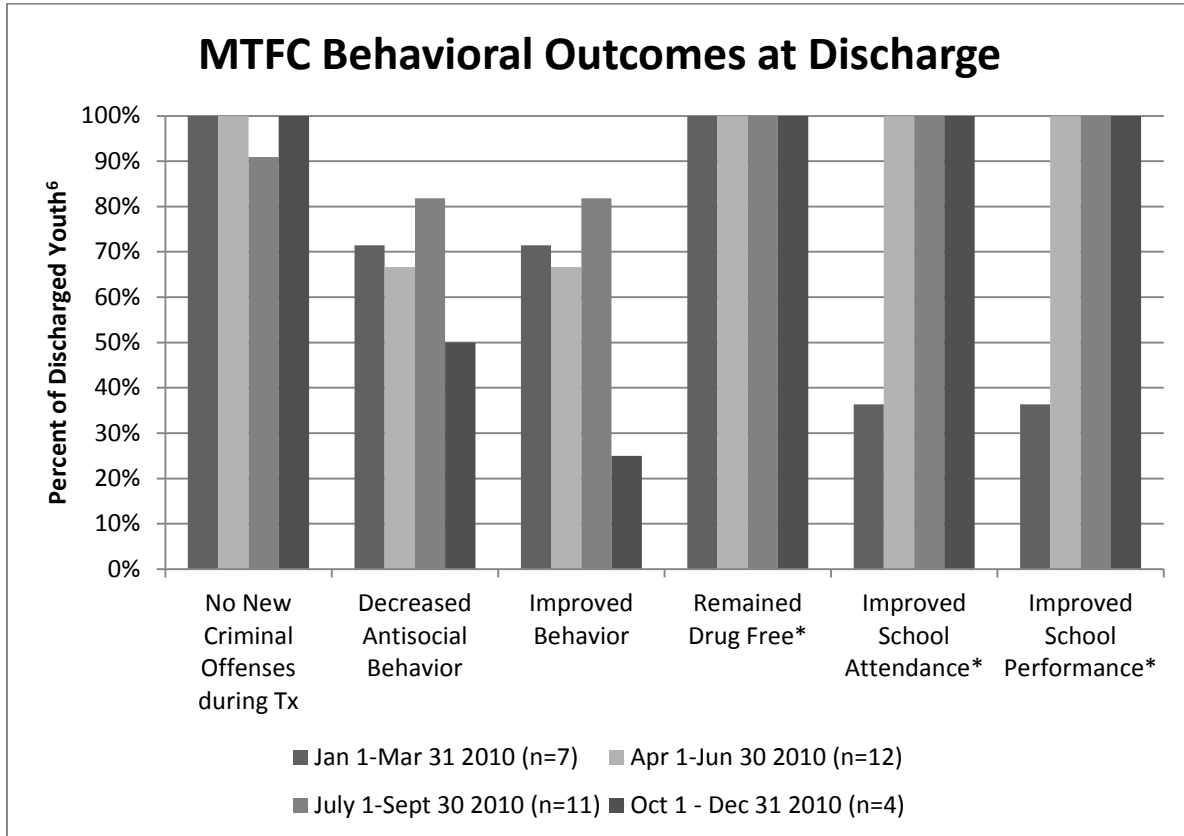
- A total of 34 youth were discharged in 2010.
- Of the 31 youth who had an opportunity to complete MTFC (i.e., were not administratively withdrawn) in 2010:
 - 21 (68%) youth were successfully discharged, defined as youth who completed the program, met their treatment goals, and were discharged to a lower level of care. The percent of youth successfully discharged steadily increased over the first three quarters and then dropped to 25% in the most recent quarter. The average length of stay for successful cases was 8.7 months, which is consistent with the MTFC model.

³ Total number of youth discharged is a sum of successfully, unsuccessfully, and administratively withdrawn youth.

⁴ Administrative withdrawals are included with unsuccessful discharges during the first quarter, as sites were not asked to report administrative withdrawals separately.

⁵ The category of administrative withdrawals is intended to capture youth discharged prior to completing the program for non-clinical reasons that are outside of the program's control (e.g., the family moving, loss of funding, or the youth being placed for an event that occurred prior to program enrollment).

- 10 youth (32%) were unsuccessfully discharged. Of these youth, 6 (60%) were placed in a more restrictive setting; this represents 18% of all youth discharged. The average length of stay for unsuccessful cases was 4.0 months.



Of the 34 youth discharged from MTFC across 2010:

- 97% had no new criminal charges during treatment.
- 71% decreased their antisocial behavior (as measured by no new charges or probation violations based on official police and probation records, parent/caregiver observations, school records, and therapist reports).
- 68% improved their overall behavior (as measured by daily reports by the treatment parents).
- 100% remained drug-free (as evidenced by negative drug screen[s] during their last three months in MTFC)*.
- 71% improved on school attendance* and 73% improved on school performance*.

⁶ Proportion of the total number of youth successfully discharged, unsuccessfully discharged, and administratively withdrawn that achieved the listed outcome as of discharge from MTFC.

*Only reported for youth who were identified with this problem at enrollment.

Multisystemic Therapy

Multisystemic Therapy (MST) is provided to youth with significant externalizing behaviors, with the primary treatment population being delinquent youth and chronic or violent juvenile offenders. Treatment focuses on changing aspects of the youth's environment (home, school, peers, and community) that contribute to or maintain the identified problem behaviors, with an emphasis on empowering parents/caregivers and developing their skills to effectively manage the youth. MST also includes frequent collaboration with other systems in which the youth is involved. Treatment takes place in the child's home, school and community. MST is an intensive, short-term treatment, typically lasting 3 to 5 months, with therapists offering crisis coverage 24 hours a day, 7 days a week.

MST Population Served

	Jan. 1– March 31, 2010	April 1– June 30, 2010	July 1– Sept. 30, 2010	Oct. 1– Dec. 30, 2010	Total
<i>Number of Providers Reporting</i>	14	13	14	14	14
<i>Youth Served</i>					
Total number of new youth enrolled	500	443	426	469	1,838
% of youth enrolled that would have been placed out-of-home	65%	69%	73%	61%	67%
Total number of youth served (new and previously enrolled cases)	1,059	994	981	1015	2,397 ⁷
Total number of new parents/caregivers served	1,257	1,041	1,005	919	4,222
<i>Referral Source</i>					
% of referrals from CYS	41%	45%	40%	46%	43%
% of referrals from Schools	3%	2%	4%	4%	3%
% of referrals from JPO	51%	45%	47%	42%	46%
% of referrals from Other	5%	8%	9%	8%	8%

⁷ Total number of youth served is the sum of the number of youth served by MST during the quarter Jan. 1–March 31, 2010, including those enrolled prior to the start of the quarter, and all new youth enrolled during subsequent quarters.

MST Population Served

- A total of 2,397 youth and 4,222 parents/caregivers were served in 2010.
- A total of 1,838 new youth were admitted to MST programs in 2010, 1,230 (67%) of whom would have otherwise been placed out-of-home according to the provider.
- The majority of referrals came from Children & Youth Services (43%) and Juvenile Probation (46%). A smaller number of referrals came from schools (3%) and other sources (8%).

MST Discharged Youth

	Jan. 1– March 31, 2010	April 1– June 30, 2010	July 1– Sept. 30, 2010	Oct. 1– Dec. 30, 2010	Total
Total number of youth discharged ⁸	460	477	426	459	1,822
% of youth successfully discharged	79%	79%	72%	75%	76%
% of youth unsuccessfully discharged	20% ⁹	14%	23%	15%	18%
% of youth administratively withdrawn ¹⁰	Not collected	8%	5%	10%	6%
% of youth placed out-of-home	12%	10%	14%	9%	11%
Average length of stay (in months) for youth successfully discharged	3.8	3.7	3.9	3.2	3.6
Average length of stay (in months) for youth unsuccessfully discharged	2.2	3.1	2.8	3.0	2.8

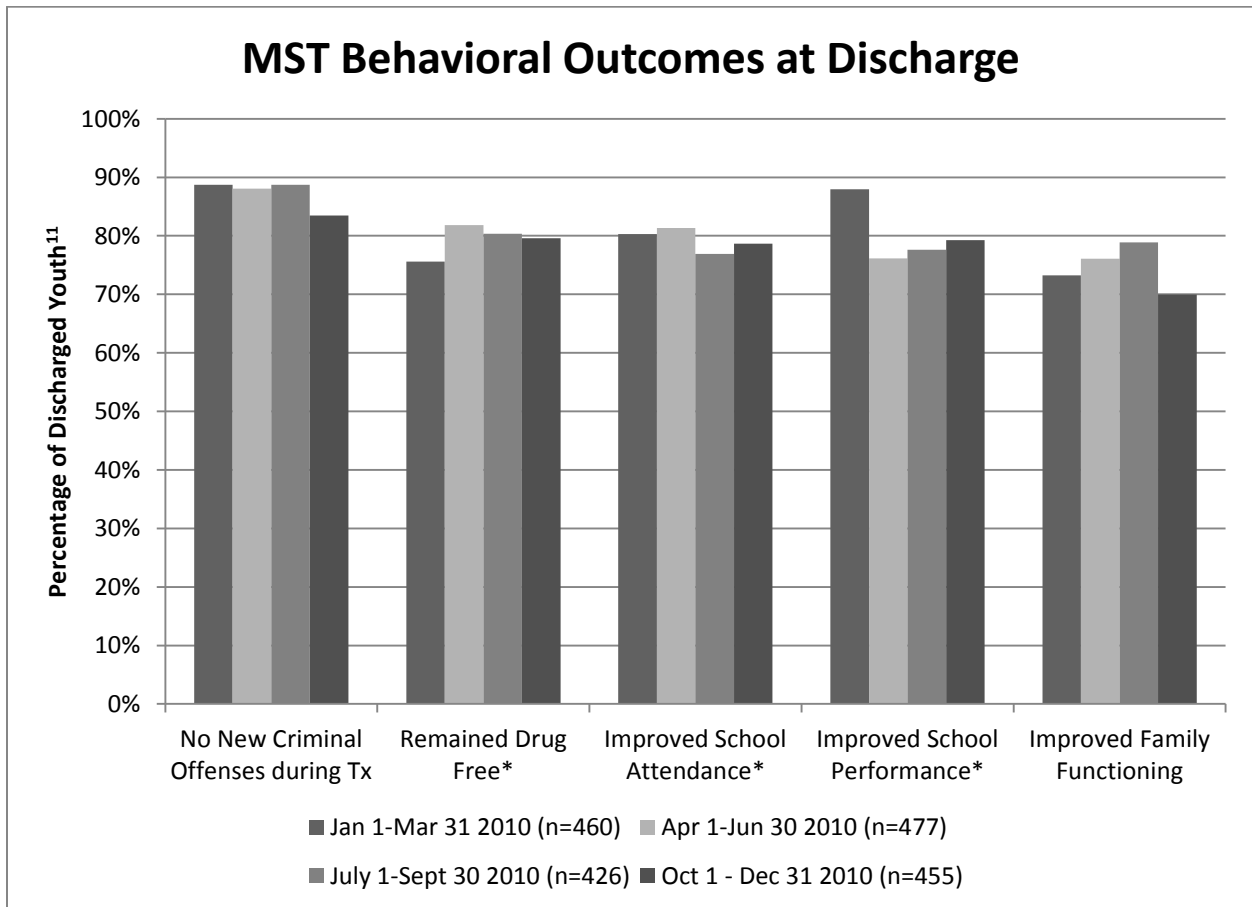
MST Discharged Youth

⁸ Total number of youth discharged is a sum of successfully, unsuccessfully, and administratively withdrawn youth.

⁹ Administrative withdrawals are included with unsuccessful discharges during the first quarter, as we did not ask sites to report administrative withdrawals separately.

¹⁰ The category of administrative withdrawals is intended to capture youth discharged prior to completing the program for non-clinical reasons that are outside of the program's control (e.g., the family moving, loss of funding, or the youth being placed for an event that occurred prior to program enrollment).

- A total of 1,822 youth were discharged in 2010.
- Of the 1,709 youth who had the opportunity to complete MST (i.e., were not administratively withdrawn) in 2010:
 - 1,388 youth (81%) were successfully discharged, defined as youth who were discharged as mutually agreed upon by their caregivers and MST team and were living at home, attending school, and had no new arrests at discharge. The average length of stay for successful cases was 3.6 months, which is consistent with the MST model.
 - 321 youth (19%) were unsuccessfully discharged. Of these youth, 202 (63%) were placed out of home; this represents 11% of all youth discharged. The average length of stay for unsuccessful cases was 2.8 months.



Of the 1,822 youth discharged from MST across 2010:

- 87% had no new criminal charges during treatment.

¹¹ Proportion of the total number of youth successfully discharged, unsuccessfully discharged, and administratively withdrawn that achieved the listed outcome as of discharge from MST.

- 79% remained drug-free (as evidenced by negative drug screen[s] during their last three months in MST)*.
- 79% improved on school attendance* and 60% improved on school performance*.
- 74% had families who experienced improved family functioning, defined as improved parenting skills and/or improved family relationships.

*Only reported for youth who were identified with this problem at enrollment

Functional Family Therapy

Functional Family Therapy (FFT) is an intensive, short-term family therapy model provided to youth who present with externalizing behaviors ranging from oppositional, defiant, and disruptive behaviors (i.e., at risk for delinquency) to serious, chronic criminal offenses. Therapy is typically conducted in the family’s home by a trained therapist. Sessions occur as frequently as necessary to meet the family’s needs and are provided over a period of about three months. The FFT model is organized around phases of treatment that emphasize engaging and enhancing the motivation of the youth and family, facilitating change within the family, and generalization of changes.

FFT Population Served

	Jan. 1– March 31, 2010	April 1– June 30, 2010	July 1– Sept. 30, 2010	Oct. 1– Dec. 30, 2010	Total
<i>Number of Providers Reporting</i>	11	10	9	10	12
<i>Youth Served</i>					
Total number of new youth enrolled	330	461	330	326	1,462
% of youth enrolled that would have been placed out-of-home	13%	9%	16%	4%	11%
Total number of youth served (new and previously enrolled cases)	544	644	576	588	1,661 ¹²

¹² Total number of youth served is the sum of the number of youth served by FFT during the quarter Jan. 1–March 31, 2010, including those enrolled prior to the start of the quarter, and all new youth enrolled during subsequent quarters.

	Jan. 1– March 31, 2010	April 1– June 30, 2010	July 1– Sept. 30, 2010	Oct. 1– Dec. 30, 2010	Total
Total number of new parents/caregivers served	475	526	497	492	2,038
Referral Source					
% of referrals from CYS	37%	26%	25%	29%	28%
% of referrals from Schools	5%	3%	3%	11%	6%
% of referrals from JPO	50%	58%	54%	49%	53%
% of referrals from Other	8%	13%	18%	11%	13%

FFT Population Served

- A total of 1,661 youth and 2,038 parents/caregivers were served in 2010.
- A total of 1,462 youth were admitted to FFT in 2010, 158 (11%) of whom would have otherwise been placed out-of-home according to the provider.
- Overall, 28% of referrals came from Children & Youth Services, 6% came from schools, 53% came from Juvenile Probation, and 13% came from other sources.

FFT Discharged Youth

	Jan. 1– March 31, 2010	April 1– June 30, 2010	July 1– Sept. 30, 2010	Oct. 1– Dec. 30, 2010	Total
Total number of youth discharged ¹³	257	326	262	330	1,175
% of youth successfully discharged	68%	71%	71%	63%	68%
% of youth unsuccessfully discharged	26% ¹⁴	26%	24%	31%	27%
% of youth administratively withdrawn ¹⁵	Not collected	3%	5%	6%	3%

¹³ Total number of youth discharged is a sum of successfully, unsuccessfully, and administratively withdrawn youth.

¹⁴ Administrative withdrawals are included with unsuccessful discharges during the first quarter, as we did not ask sites to report administrative withdrawals separately.

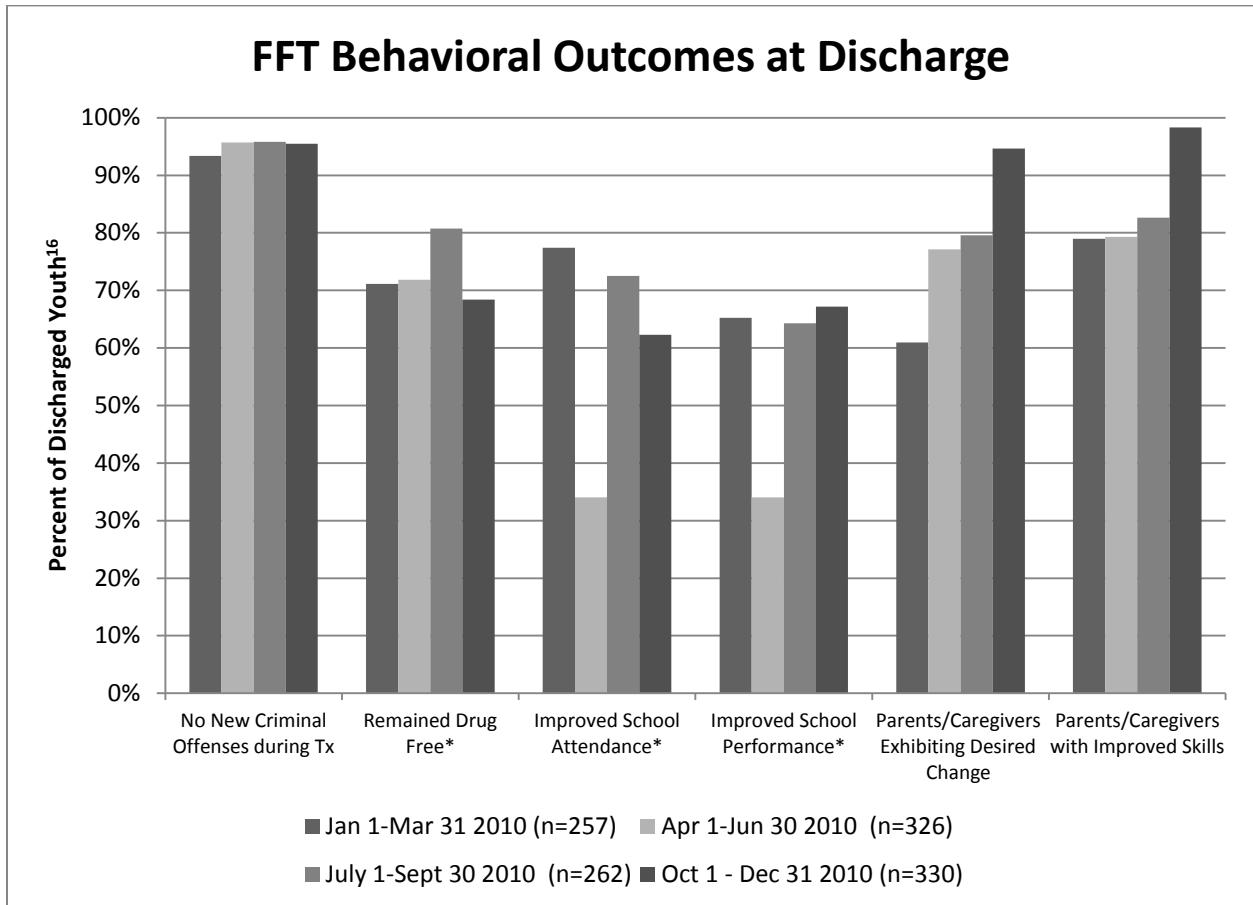
¹⁵ The category of administrative withdrawals is intended to capture youth discharged prior to completing the program for non-clinical reasons that are outside of the program's control (e.g., the family

	Jan. 1– March 31, 2010	April 1– June 30, 2010	July 1– Sept. 30, 2010	Oct. 1– Dec. 30, 2010	Total
% of youth placed out-of-home	8%	4%	6%	4%	5%
Average length of stay (in months) for youth successfully discharged	3.6	4.0	3.5	3.7	3.7
Average length of stay (in months) for youth unsuccessfully discharged	2.2	2.5	2.7	2.8	2.6

FFT Discharged Youth

- A total of 1,175 youth were discharged in 2010.
- Of the 1,120 youth who had the opportunity to complete FFT (i.e., were not administratively withdrawn) in 2010:
 - 801 youth (72%) were successfully discharged, defined as youth who completed all phases of treatment and were rated positively on Therapist and Client Outcome Measures, indicating a reduction in risk factors and increase in protective factors. The average length of stay for successful cases was 3.7 months, which is consistent with the FFT model.
 - 319 youth (28%) were unsuccessfully discharged. Of these youth, 63 (20%) were placed out-of-home; this represents 5% of all youth discharged. The average length of stay for unsuccessful cases was 2.6 months.

moving, loss of funding, or the youth being placed for an event that occurred prior to program enrollment).



Of the 1,175 youth discharged from FFT across 2010:

- 95% had no new criminal charges during treatment.
- 73% remained drug-free (as evidenced by negative drug screen[s] during their last three months in FFT)*.
- 60% improved on school attendance* and 60% improved on school performance*.

Of the 1245 parents/caregivers discharged from FFT across 2010:

- 80% exhibited desired change.
- 71% showed improvement in their parenting skills.

*Only reported for youth who were identified with this problem at enrollment

¹⁶ Proportion of the total number of youth successfully discharged, unsuccessfully discharged, and administratively withdrawn that achieved the listed outcome as of discharge from FFT.

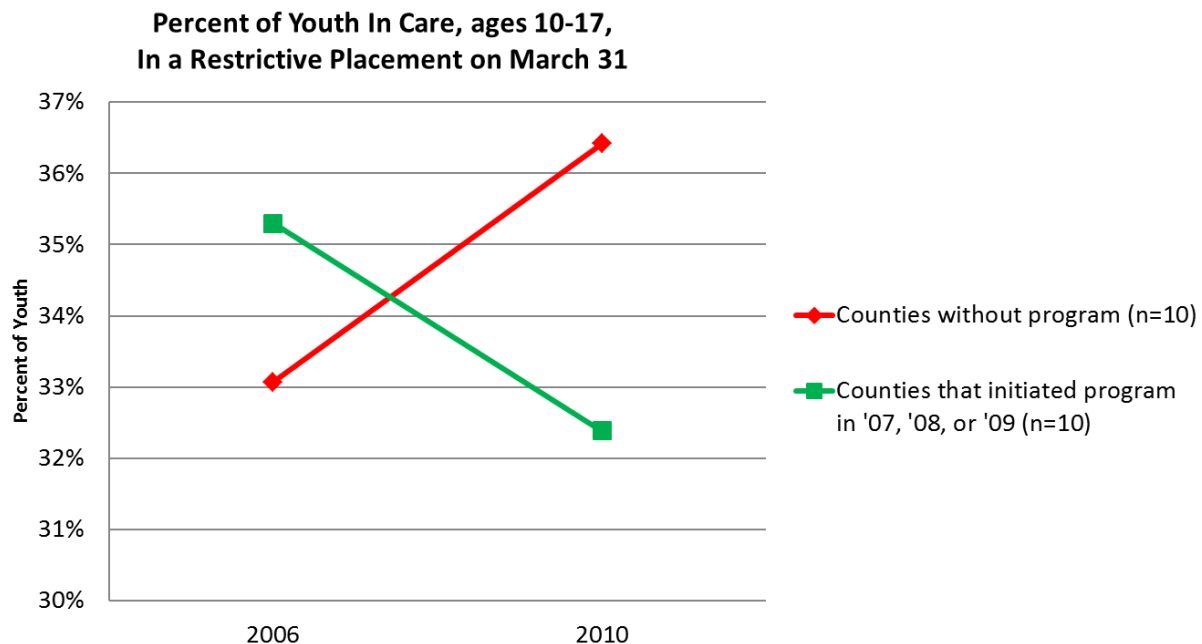
Overall Impact of Evidence-based Programs

County Placement Rates

In addition to the quarterly data reported above, we also examined the placement rates (as reported by the Pennsylvania Office of Children, Youth, and Families, OCYF) for counties with and without MTFC, MST, and/or FFT to determine if there was an association between the implementation of these programs and county placement rates. To do this, we compared placement rates for two groups (see Figure below):

- 1) 10 counties that had no MTFC, MST, or FFT program in the past five years (red line), and
- 2) 10 counties that did not have an MTFC, MST, or FFT program in 2006, but began implementation of at least one of these programs between 2007 and 2009 (green line).

The analysis examined the percent of youth in care, ages 10-17, who were residing in an institution or group home on March 31 of each year. The results showed that in 2006, counties that would later implement at least one of these programs had a slightly higher placement rate (by about 2%). However, by 2010, the reverse was true, with counties that began at least one of these programs between 2007 and 2009 having about a 3% lower placement rate than the counties that had not implemented any of these programs. **Counties not using these evidence-based programs showed a 3.35% increase in placement rates from 2006 to 2010, whereas counties that began at least one of these programs showed a 2.92% decrease in**



Economic Benefits

In addition to the positive youth and family outcomes associated with these programs, there is also likely to be an economic benefit. Given the association between program implementation and reduction in county-level placement rates reported above, one potential area of cost savings is the immediate cost savings associated with fewer youth going into expensive, out-of-home placements. As presented in this report, 3,345 youth were enrolled in 2010. According to therapist reports, 1,426 of those youth would have otherwise been placed into a more restrictive setting if they had not received treatment in FFT, MST, or MTFC. **In all, 2,205 youth were successfully discharged and 826 were unsuccessfully discharged from their programs.**

If we assume that every youth unsuccessfully discharged went through the intervention program at full cost, and then went into placement at full cost (estimated based on a 90-day placement at a daily cost reflecting the average of all Department of Public Welfare (DPW) public residential facilities), and compare this to the cost of every youth who was at risk of placement going into placement instead of one of the programs, **there is an immediate cost savings of \$4,498,072 related to diversion from placements for all three programs.**

Many evaluations of the effectiveness of MTFC, MST, and FFT have demonstrated reductions in future criminal offenses and recidivism for youth who participate in these programs as compared to youth who do not participate in these programs. Therefore, another potential area for cost savings is related to the potential longer-term savings associated with reductions in crime, including savings related to cost to victim and cost of crime (incarceration, etc.). In 2008, the Pennsylvania State Prevention Research Center published a report on the economic return on investment associated with the implementation of a number of evidence-based programs, including MTFC, MST, and FFT, funded by PCCD (Jones, Bumbarger, Greenberg, Greenwood, & Kyler, 2008). Using the estimated benefit-cost per youth from that report, we calculated the estimated economic benefit related to crime reduction associated with these programs for 2010 (see Table below). **Based on all youth discharged from one of these programs in 2010, the total economic benefit is estimated at \$108,758,185.** However, if we take a more conservative approach and only include youth successfully discharged in 2010, **the economic benefit associated with reductions in future crime is still over \$77 million.**

Program	Benefit-Cost per Youth (2010\$)	Youth Discharged, 2010	Estimated Economic Benefit (crime reduction)
FFT	\$57,341	1,175	\$67,375,675
MST	\$22,096	1,822	\$40,258,912
MTFC	\$33,047	34	\$1,123,598

Reference

Jones, D., Bumbarger, B. K., Greenberg, M. T., Greenwood, P., & Kyler, S. (2008). The Economic Return on PCCD's Investment in Research-based Programs: A cost-benefit assessment of delinquency prevention in Pennsylvania. University Park, PA: The Pennsylvania State University.

Please contact Brittany Rhoades at blr162@psu.edu or 814-232-0640 with any questions.

The EPISCenter is a project of the Prevention Research Center, College of Health and Human Development, The Pennsylvania State University, and is supported through funding from the Pennsylvania Commission on Crime and Delinquency and the Pennsylvania Department of

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