Keeping Kids Close to Home:  
Targeted RECLAIM 2014 & 2015 Outcome Evaluation  

Final Report  

SUBMITTED TO:  
Anthony F. Panzino, Bureau Chief  
Bureau of Courts and Community Services  
Department of Youth Services  

PREPARED BY:  
Stephanie Spiegel, M.S.  
Jr. Research Associate  

Jennifer Lux, Ph.D.  
Research Associate  

Myrinda Schweitzer, Ph.D.  
Deputy Director  

and  

Edward J. Latessa, Ph.D.  
Director  

University of Cincinnati  
Corrections Institute  

Final Report Submitted: March 23, 2018  

This project was supported by a contract with the Ohio Department of Youth Services (DYS). The opinions, findings, conclusions, and recommendations expressed in this report are those of the authors and do not necessarily reflect the views of DYS. Please address all correspondence regarding this report to Stephanie Spiegel and/or Jennifer Lux at the University of Cincinnati Corrections Institute (UCCI). Correspondence can be sent to UCCI, Attn: Stephanie Spiegel & Jennifer Lux, P.O. Box 210389, Cincinnati, OH 45221-0389 or e-mailed directly to stephanie.spiegel@uc.edu and/or jennifer.lux@uc.edu.
ACKNOWLEDGEMENTS

This large-scale project could not have been completed without the efforts and cooperation of many programs, agencies, and individuals. Specifically, the authors wish to thank Ryan Gies, James Hearns, Tony Panzino, and Bruce Sowards from the Ohio Department of Youth Services for their continued commitment and support. The authors would also like to thank the many staff that have been a part of Targeted RECLAIM:

Allen County
Cathy Follett
Christine Hoff
Dr. Thomas Hull
Julie Norberg

Ashtabula County
Andrew Misiak
Brian Perusek
Kathleen Thompson

Butler County
Rob Clevenger
Devin Goodman
Franklin Hardesty
James Manley
Chelsea Watson

Cuyahoga County
Jeffrey Berman
La Terra Brown
Bridget Gibbons
Melisa McDaniel
Joellen Woodring

Franklin County
Diane Mueller
Beverly Seffrin

Hamilton County
Greg Bingam
Nathan Lynch
Edward Ryan
Lindsey Schackelford
Liz Torrison

Licking County
Joe Camp
David Edelblute
Kandy Humphrey

Lorain County
Jodi Barilla
Erik Ponzie
Heather Rider

Lucas County
Cheryl Bath
Tara Hobbs
Sherri Munn

Mahoning County
Ronald Edwards
Andre Elliot

Medina County
Maureen Klecar

Montgomery County
Gretchen Althaus
Ashley Clayton
Jim Cole
Beth Dostal
Steve Mongelli
Darlene Powell
Linda Scott
Eric Shafer

Stark County
Robert Fernandez
Joyce Salapack
Tim Wires

Summit County
Curtis Howard

Trumbull County
Sonya Thompkins
Stacy Ziska
EXECUTIVE SUMMARY

The Ohio Department of Youth Services (DYS) contracted with the University of Cincinnati Corrections Institute (UCCI) to evaluate the effectiveness of Targeted RECLAIM (TR). Participants included youth admitted to a Targeted RECLAIM program (N = 1,327) and youth who were released from DYS custody (N = 993) between January 1, 2014 and December 31, 2015. Recidivism was defined as any new incarceration to a DYS or Ohio Department of Rehabilitation and Correction (DRC) facility after admission to TR or release from DYS.

Propensity score matching (PSM) was used to compare the incarceration rates of youth who participated in TR programming relative to similarly matched youth released from DYS. Outcomes were also examined for TR youth by service type (community residential, cognitive behavioral interventions [CBI], and family interventions) relative to youth released from DYS. In addition, the validity of the Ohio Youth Assessment System (OYAS) was explored. Finally, TR program completion status was investigated to determine whether recidivism rates of youth who completed a TR program significantly differed from those who did not complete a TR program.

Overall, the findings suggest that Targeted RECLAIM is an effective justice reinvestment strategy and way for the state to reduce youth recidivism and maintain public safety. Even when pretreatment characteristics (e.g., gender, race, age at admission, and risk level) were taken into consideration, the results demonstrated that youth who participated in Targeted RECLAIM programs were incarcerated less than similarly matched youth who were released from DYS. Reductions in recidivism were also found across TR service types, suggesting that residential, CBI, and family interventions provided in the community are effective strategies for reducing the risks and needs of youth involved in the juvenile justice system.
In addition, the findings suggest that the OYAS is a valid risk assessment system for predicting youth’s likelihood to reoffend. With regard to program completion, findings demonstrate that youth who unsuccessfully completed TR were significantly more likely to reoffend than youth who successfully completed or were still enrolled in TR during the study period.

Recommendations are provided to DYS for improvement and advancement of the TR initiative in the future. Briefly, these recommendations include:

- DYS and TR counties should continue to monitor the number of low risk youth admitted to TR programs. DYS and the counties should be especially mindful of the number of low risk youth admitted to TR programs who are adjudicated for a misdemeanor or a lower level felony offense (F4-F5).

- DYS and TR counties are encouraged to revise and/or review their assessment processes and procedures to ensure fidelity to the tools and reliability to youths’ assessment results.

- DYS should continue to ensure TR services support behavior change and adhere to evidence based practices. TR counties and the staff who provide treatment should be trained to use core correctional practices, attend advanced booster trainings, and target criminogenic need areas using evidence-based and/or evidence-informed approaches.

- DYS and TR counties should work with quality assurance providers to revise and/or review the data collection process to ensure consistency.
## TABLE OF CONTENTS

INTRODUCTION .................................................................................................................. 7
   Prior Evaluations of Targeted RECLAIM ................................................................. 8
CURRENT STUDY ........................................................................................................... 10
I. METHOD ....................................................................................................................... 10
   Data Collection & Sample Selection Processes .................................................... 10
   Participants ............................................................................................................. 11
   Description of Treatment & Comparison Group Conditions ......................... 12
      Targeted RECLAIM ......................................................................................... 12
      DYS .................................................................................................................... 15
   Outcome Measure ............................................................................................... 16
   Statistical Analyses ............................................................................................. 16
II. RESULTS .................................................................................................................... 17
   Targeted RECLAIM Sample Characteristics ..................................................... 18
   TR & DYS Matched Sample Characteristics & Recidivism Results .................. 21
      Sample Characteristics .................................................................................... 22
   New Incarceration Rates for TR & DYS Matched Samples ............................... 23
   Recidivism Rates for TR Youth by Service Type & DYS Matched Samples ....... 24
   Further Exploration ............................................................................................. 29
      The Predictive Validity of the OYAS ................................................................. 29
      Completion Status ............................................................................................ 30
III. SUMMARY, LIMITATIONS, & RECOMMENDATIONS ............................................ 32
   Summary of the Findings ..................................................................................... 32
   Limitations ............................................................................................................. 33
      Data Collection ................................................................................................. 33
      Method ............................................................................................................... 34
      Outcome Measures ........................................................................................... 35
REFERENCES ................................................................................................................. 37
APPENDIX A–TARGETED RECLAIM SERVICES BY COUNTY ...................................... 42
LIST OF TABLES & FIGURES

TABLE 1. DESCRIPTIVE STATISTICS FOR TR YOUTH BY SERVICE TYPE ..........................................................19
TABLE 2. LOW RISK TR YOUTH BY OFFENSE LEVEL & SERVICE TYPE ..........................................................21
TABLE 3. DESCRIPTIVE STATISTICS FOR TR & DYS MATCHED SAMPLES .........................................................22
TABLE 4. NEW INCARCERATION RATES FOR TR & DYS MATCHED SAMPLES BY RISK LEVEL .................23
FIGURE 1. NEW INCARCERATION RATES FOR TR & DYS MATCHED SAMPLES BY RISK LEVEL ..............24
FIGURE 2. NEW INCARCERATION RATES FOR TR COMMUNITY RESIDENTIAL & DYS MATCHED SAMPLES BY RISK LEVEL ........................................................................................................25
TABLE 5. NEW INCARCERATION RATES BY RISK LEVEL FOR TR YOUTH BY SERVICE TYPE & DYS MATCHED SAMPLES ..........................................................................................................................26
FIGURE 3. NEW INCARCERATION RATES FOR TR CBI & DYS MATCHED SAMPLES BY RISK LEVEL ........28
FIGURE 4. NEW INCARCERATION RATES FOR TR FAMILY INTERVENTIONS & DYS MATCHED SAMPLES BY RISK LEVEL ......................................................................................................................................29
TABLE 6. COMPLETION STATUS BY RISK LEVEL FOR TR YOUTH ................................................................30
TABLE 7. NEW INCARCERATION RATES BY COMPLETION STATUS & RISK LEVEL FOR TR YOUTH 32
APPENDIX TABLE 1. TR SERVICES BY COUNTY ........................................................................................................42
INTRODUCTION

Justice reinvestment strategies encourage state agencies to reduce their reliance on incarceration and confinement and reinvest in community alternatives to serve youth closer to home. These strategies range from policy reform and analysis to incentive-based programs for juvenile justice reform (Clear, 2011). In response to a growing need for local alternatives for juvenile courts and overcrowding in state institutions, the Ohio Department of Youth Services (DYS) developed the Reasoned and Equitable Community and Local Alternatives to the Incarceration of Minors (RECLAIM) program in 1993 (Lowenkamp & Latessa, 2005).¹ The RECLAIM initiative is important for three reasons. First, through RECLAIM funding, DYS offers fiscal incentives to courts to develop programs and/or contract with community-based agencies in order to keep youth adjudicated of less serious offenses in local programs. Second, through the unique RECLAIM funding formula, courts have an opportunity to increase the funds available locally by diverting youth from DYS institutions. This fiscal realignment allows counties to implement and expand local programming and services. Third, RECLAIM has led to the establishment of meaningful state-local partnerships. These partnerships have subsequently allowed for the continued evolution of the model to support the implementation of evidence-based community programs to serve young people throughout the state (Celeste, 2015; Lux, Schweitzer, & Chouhy, 2015).

Building off of the RECLAIM model and advancing best practices, DYS established Targeted RECLAIM (TR) in 2009. TR offers the counties with the highest commitment rates in the state an incentive to divert youth from DYS by addressing their criminogenic needs in the community. Funding for Targeted RECLAIM is reserved for the development of new community

¹ RECLAIM was created as part of House Bill 152.
programs, the expansion or improvement of existing programs, and the establishment of partnerships with behavioral health providers. In addition to financial support, staff in each TR county receive initial and ongoing training, coaching, and implementation support from the University of Cincinnati Corrections Institute (UCCI) and/or Case Western Reserve University (CWRU) to ensure program fidelity.

The TR initiative began as a means to help the six largest counties in Ohio that historically committed the most youths to DYS facilities (DYS, 2013). According to the National Center for Justice Planning (NCJP, 2012), these counties accounted for well over half (63%) of the total DYS admissions during the year prior to the initiation of TR. Preliminary data examining the effectiveness of TR to reduce DYS admissions demonstrated a 39% reduction in commitments in 2010 and an additional 23% in 2011 (NCJP, 2012). With these promising results, TR funds were awarded to an additional eight counties across the state that collectively committed almost 200 youths to DYS during 2011. Finally, one additional county was added to the TR list during 2013, for a total of 15 TR sites:

1) Allen County  
2) Ashtabula County  
3) Butler County  
4) Cuyahoga County  
5) Franklin County  
6) Hamilton County  
7) Licking County  
8) Lorain County  
9) Lucas County  
10) Mahoning County  
11) Medina County  
12) Montgomery County  
13) Stark County  
14) Summit County  
15) Trumbull County

Prior Evaluations of Targeted RECLAIM

Evaluations examining the efficacy of TR post-expansion (i.e., including the 15 current TR sites) have demonstrated promising results (Labrecque & Schweitzer, 2013; Labrecque, Schweitzer, & Smith, 2017). In an evaluation of the program in 2013, for example, it was found that youth who participated in Targeted RECLAIM programs were less likely to be incarcerated than youth who had served time in custodial placement (i.e., DYS and Ohio Department of
Rehabilitation and Correction [DRC] institutions; Labrecque & Schweitzer, 2013). Similarly, in a more recent evaluation of the initiative, it was found that TR youth were 34% less likely to be incarcerated than similarly matched DYS youth (Spiegel, Schweitzer, & Latessa, 2015). When the results were examined by TR program type (community residential, cognitive behavioral interventions in the community, and family interventions), it was found that youth who participated in residential and CBI in the community were approximately 32% less likely to be incarcerated in a DYS/DRC facility than their DYS counterparts. A sizable difference in recidivism rates (approximately 38%) was also found between youth who received family services and similarly matched DYS youth. Ultimately, the efficacy of Targeted RECLAIM has allowed Ohio to decrease its correctional footprint and empower counties to keep youth in the community rather than sending them to state facilities (Labrecque & Schweitzer, 2013; NCJP, 2012; Schweitzer, 2016; Spiegel et al., 2015; see also Lux et al., 2015).

In addition to the promising results highlighted above, a decrease in the rate of DYS commitments more generally across the state of Ohio has been reported (NCJP, 2012; Schweitzer, 2016). For example, counties committed fewer youth to DYS in 2014 and 2015 than in 2012 and 2013. Five hundred and twenty-two youth were committed in 2014 and 468 youth were committed in 2015, compared to 633 youth in 2012 and 552 youth in 2013 (DYS, 2014, 2015). Further, Ohio’s efforts to reduce admissions to DYS are consistent with prior research that has found interventions provided in the community are more effective at reducing juvenile delinquency and crime compared to incarceration (Andrews & Bonta, 2010; Lipsey & Cullen, 2007). These results, coupled with the continued expansion of the RECLAIM initiative in Ohio, suggest Targeted

---

2 Reductions in DYS commitments may be due to a series of ongoing initiatives implemented in the state of Ohio (see e.g., Lux, et al., 2015).
RECLAIM is an effective justice reinvestment strategy and way for the state to reduce youth recidivism and maintain public safety.

CURRENT STUDY

DYS contracted with UCCI to evaluate the efficacy of Targeted RECLAIM programming provided to youth in 2014 and 2015. The current report is divided into three sections. Section I provides a summary of the method used to complete the study, including a description of data collection and sample selection processes, study participants, treatment and comparison group conditions, the outcome measure of interest, and the types of statistical analyses conducted. Section II presents the results of the study and is divided into three subsections: (1) TR youth sample characteristics, (2) recidivism results for both TR and similarly matched DYS youth, and (3) further exploration of the data including an examination of the validity of the OYAS as well as further investigation into TR program completion status. Finally, Section III presents a summary of the study’s findings, discusses limitations to the study, and offers recommendations to DYS for improvement and advancement of the TR initiative in the future.

I. METHOD

Data Collection & Sample Selection Processes

In order to evaluate the effectiveness of the TR initiative, youth who received TR programming were compared to youth who were released from DYS institutions. Thus, TR youth served as the treatment group while DYS youth served as the comparison group. Data collection and subsequent sample selection processes required ongoing communication and cooperation between UCCI, DYS, DRC, and the Targeted RECLAIM counties. Several steps were taken to collect data and ensure their accuracy.
First, based on information TR counties sent DYS during 2014 and 2015, DYS queried their data system to identify youth to be included in the current study. Youth were included in the sample if (1) they were served in a Targeted RECLAIM program in one of the aforementioned TR counties (2) in calendar year (CY) 2014 and/or 2015. Once DYS identified the sample, a spreadsheet with all relevant information was sent to UCCI for cleaning and analysis. UCCI staff then separated the data by county and sent the information to each Targeted RECLAIM site to verify their accuracy and fill in any missing information. Data related to youth characteristics (e.g., date of birth, age at admission, and risk level) and treatment services (e.g., service type, date of admission to TR, date of release, and release status) were collected.

Similar data collection and sample selection processes were used to collect comparison group data. That is, DYS sent UCCI a spreadsheet identifying youth released from DYS in CY 2014 and/or 2015. Data related to youth characteristics (e.g., admitting county, date of birth, age at admission) and release information (e.g., date of release and risk level at release) were collected. Completed TR and DYS spreadsheets were then sent to DYS and DRC so that recidivism data could be collected on all youth. Recidivism was identified through youth’s first and last name, date of birth, and/or DYS number for both treatment and comparison groups.

**Participants**

As discussed above, participants included Targeted RECLAIM youth and youth who were released from DYS custody during CY 2014 and 2015. Specifically, the treatment group included youth who participated in any Targeted RECLAIM program between January 1, 2014 and December 31, 2015 (N = 1,327). Priority was given to the first exposure to Targeted RECLAIM in instances when youth participated in multiple programs over the course of the study timeframe.
Comparison group youth included youth who were released from a DYS facility during the same time period (N = 993).

Descriptive characteristics, including gender, race, and age at the time of admission to Targeted RECLAIM or DYS were collected. Risk level information from the Ohio Youth Assessment System (OYAS) were also collected. In instances when multiple OYAS assessments were available for a youth, the most comprehensive assessment (i.e., a full instrument versus a screening instrument) closest to the Targeted RECLAIM start date or DYS release date was selected. In addition, priority was given to the assessment that was the most appropriate for the setting in which the youth was being supervised/receiving services (e.g., the OYAS Reentry Tool was chosen over the OYAS Diversion Tool for youth released from DYS).

**Description of Treatment & Comparison Group Conditions**

**Targeted RECLAIM.** Targeted RECLAIM counties are encouraged to select high-quality interventions that match the risk and criminogenic needs of the youth being served in their communities. Likewise, counties are able to choose to implement programming in a community residential program, an outpatient program, or within their probation department. As such, the types of services or programs funded through Targeted RECLAIM vary. For the current study, TR programs were classified as one of three service types: (1) community residential programs, (2) CBI in the community, and (3) family interventions in the community (see Appendix A for a description of the services provided in each Targeted RECLAIM county during CY 2014 and 2015).

**Community Residential Programs.** TR-funded programs and services provided within community residential facilities varied in terms of the types of services offered within the facility, how youth were admitted to the program, and the length of treatment. Services provided to youth
during CY 2014 and 2015, for example, ranged from structured group interventions such as Thinking for a Change (T4C; Bush, Glick, & Taymans, 1997), Aggression Replacement Training (A.R.T.®, Goldstein, Glick, & Gibbs, 1998), and Pathways to Self-Discovery and Change (Milkman & Wanberg, 2005), to activities such as orientation classes, educational services, vocational and job readiness services, and/or recreational services.

While a detailed discussion outlining the differences between each residential program is beyond the scope of the current report, it is important to note more generally that programs in this category provide intensive services (in terms of dosage and the number of services offered) and are designed to target higher risk youth with multiple criminogenic needs. In addition, youth are required to remain in treatment or on facility grounds. For the current study, a program was classified as community residential if the participants were required to remain in the facility while receiving treatment. Seven programs were included under the community residential program category: (1) Allen County Juvenile Treatment Center, (2) Cuyahoga County Community-Based Treatment Center, (3) Hamilton County Hillcrest School, (4) Hamilton County Lighthouse Youth Center-Paint Creek, (5) Lucas County Residential Treatment Center, (6) Montgomery County Juvenile Court Alternative Rehabilitation Effort, and (7) Summit County Cognitive Behavioral Treatment.

*Cognitive Behavioral Interventions.* Four CBI programs were funded and supported in the community via Targeted RECLAIM: (1) T4C (Bush et al., 1997), (2) A.R.T.® (Goldstein et al., 1998), (3) Cognitive Behavioral Interventions for Substance Abuse (CBI-SA; UCCI, 2014a), and (4) Effective Practices in Community Supervision (EPICS; UCCI, 2014b).

- *Thinking for a Change:* T4C is a 25-session cognitive behavioral curriculum endorsed by the National Institute of Corrections (NIC; Bush et al., 1997). Sessions focus on helping youth to identify and restructure high risk thoughts that may lead to trouble or antisocial behavior, develop problem solving skills, and learn skills to deal with high risk situations.
T4C has been shown to be an effective strategy for reducing delinquency and crime (Golden, 2002; Lowenkamp, Hubbard, Makarios, & Latessa, 2009; Wingeard, 2008).

- **Aggression Replacement Training**: A.R.T.® is a multi-model intervention designed to promote prosocial behavior in chronically aggressive and violent individuals. The program is a 10-week, 30-hour intervention that consists of three interrelated components for aggression-reduction: (1) Structured Skill Training, (2) Anger Control Training, and (3) Moral Reasoning. Structured Skill Training focuses on youth’s interpersonal skills and teaches them how to manage high risk situations involving others. Anger Control Training teaches youth to recognize internal and external triggers for aggression and how to use coping skills. Finally, Moral Reasoning provides youth opportunities to discuss problem situations and learn how to take perspectives other than their own. Prior findings indicate A.R.T.® is an effective intervention to reduce recidivism and aggressive behavior among youth (Gundersen & Svartdal, 2006; Barnoski, 2004). Systematic reviews on the effectiveness of cognitive behavioral interventions have also included A.R.T.® and found promising results (see e.g., Brännström, Kaunitz, Andershed, South, & Smedslund 2016; Landenberger & Lipsey, 2005; Lipsey, Landenberger, & Wilson, 2007).

- **Cognitive Behavioral Interventions for Substance Abuse**: CBI-SA (UCCI, 2014a) is a 39-session curriculum designed for individuals who are moderate to high need in the area of substance abuse. The curriculum can be delivered as a stand-alone substance abuse intervention or incorporated into a larger program for adult or youth populations. As the name of the curriculum suggests, this intervention relies on a cognitive behavioral approach to teach youth strategies to manage high risk situations that may lead to substance use and places a heavy emphasis on skill building activities to assist with cognitive, social, emotional, and coping skill development. While no formal evaluation has been completed with juvenile offenders, a recent evaluation of the CBI-SA program by the Kansas Department of Corrections found that offenders who participated in CBI-SA had significantly lower rates of recidivism overall compared to nonparticipants (approximately 29% vs. 36%, respectively; Bechtel, 2015). More generally, cognitive behavioral strategies have routinely demonstrated high treatment effects for both adult and juvenile offenders (see Andrews & Bonta, 2010 for a review).

- **Effective Practices in Community Supervision**: The EPICS model offers a mechanism to teach community supervision officers to target criminogenic need areas using core correctional practices. There have been several evaluations of the EPICS model to-date, which have revealed a wide range of positive outcomes, including increased time spent on criminogenic needs (Smith, Schweitzer, Labrecque, & Latessa, 2012), improved offender-officer relationships (Labrecque, Schweitzer, & Smith, 2013a), increased use of core correctional skills (e.g., active listening, giving feedback, effective reinforcement and disapproval, problem solving skills) (Labrecque, Schweitzer, & Smith, 2013b), improved
offender attitudes (Labrecque, Smith, Schweitzer, & Thompson, 2013), and reductions in recidivism (Latessa, Smith, Schweitzer, & Labrecque, 2012).

**Family Interventions.** Two family intervention strategies were funded and supported in the community via Targeted RECLAIM: (1) Multisystemic Therapy (MST) and (2) High Fidelity Wrap Around (HFWA). These programs seek to divert and treat multi-need youth and their families under TR.

- **Multisystemic Therapy:** MST is an intensive family-based intervention (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 2009) that uses a combination of strategies (e.g., cognitive behavioral therapy, behavioral training) to target need areas linked to antisocial behavior such as family functioning, poor academic performance and/or attendance, and peer associations. Specifically, the MST program is designed for youth’s multiple needs and seeks to enlist the support of the school, peers, and other key community agents to help maintain the benefits of treatment (Culpit, Henggeler, Taylor, & Addison, 2005). Evidence demonstrates that MST is an effective intervention for reducing antisocial behaviors among youth (Curtis, Ronan, & Borduin, 2004), and are especially pronounced when MST therapists deliver the interventions (Barnoski, 2004) with high fidelity to the MST model.

- **High-Fidelity Wraparound:** HFWA is a youth-guided, family-driven team planning process for individualized care in the community. Services focus on youth with complex behavioral health needs at risk for further involvement in the juvenile justice system (Winter & Metz, 2009). As the name of the intervention suggests, this process involves wrapping services around the youth and their support networks for long-term behavior change (Winters & Metz, 2009). While definitions vary, there is a general consensus that wraparound programs work in collaborative, inter-agency teams; include care coordinators who provide treatment and support to youth and family participants; involve supports outside of the juvenile justice system including, family members, paid service providers, and/or community members such as teachers or mentors who work as part of the care team (Development Services Group, Inc., 2014). Prior evaluations indicate that HFWA is a promising strategy to address youth delinquency (Suter & Bruns, 2009; Winters & Metz, 2009; see also OJJDP, 2014; Pullman et al., 2006; Carney & Buttell, 2003).

**DYS.** DYS is the juvenile corrections system for the state of Ohio. The Department confines felony offenders, ages 10 to 21, who have been adjudicated and committed by one of the state’s 88 county juvenile courts. During their stay with DYS, youth are engaged in programming
that is designed to address their criminogenic and behavioral needs. Each of the three DYS facilities also operates a year-round school that offers general curriculum as well as vocation opportunities.

**Outcome Measure**

Recidivism was defined as any new incarceration to DYS or DRC after admission to Targeted RECLAIM or release from DYS. A new incarceration to DYS/DRC was selected as the dependent variable because one of the major goals of Targeted RECLAIM is to reduce the number of commitments to juvenile and adult correctional facilities. Time at risk was standardized to 12 months for all youth. Thus, youth were considered to have a new incarceration to DYS or DRC if the date of incarceration was after their admission date to TR or release from DYS and within the current study’s 12-month follow-up period.

**Statistical Analyses**

Several sets of analyses were conducted in the current study. First, univariate statistics were computed (e.g., frequencies, percentages, means, and standard deviations) on basic youth demographics for the TR sample (e.g., gender, race, risk level, and age). Before conducting analyses comparing Targeted RECLAIM youth to matched DYS youth, descriptive statistics (race, gender, age at admission, and risk level) were compared to ensure youth in both groups were not significantly different from one another. From here, several bivariate and multivariate analyses were conducted. First, incarceration rates were computed for youth who received Targeted RECLAIM services in 2014 and 2015 and for youth released from a DYS facility during the same year. Second, recidivism rates by level of risk were examined for both Targeted RECLAIM and DYS groups. Third, analyses were conducted in order to examine the recidivism rates of Targeted
RECLAIM youth by program type (community residential, cognitive behavioral interventions in the community, and family interventions) and similarly matched DYS youth by risk level.

To conduct the analyses described above, propensity score matching (PSM) was used (Rosenbaum & Rubin, 1983; see also Apel & Sweeten, 2010). The goal of PSM is to balance treatment and comparison groups on observed pre-intervention characteristics (Luo, Gardiner, & Bradley, 2010). In the current study, youth were matched on the following pre-treatment characteristics: (1) gender, (2) race, (3) age at admission, and (4) OYAS risk level. Differences in rates of recidivism between TR youth and DYS matched comparison youth were subsequently summarized to obtain an average treatment effect.

Notably, there were more youth enrolled in Targeted RECLAIM during 2014 and 2015 (N = 1,327) compared to youth released from a DYS facility during the same time period (N = 993). In addition, there were notable differences between the two groups on many of the key demographic characteristics identified above. As such, PSM with replacement was employed (Grilli & Rampichini, 2011). Since PSM with replacement allows comparison cases to be reused or put back in the sampling pool, the majority of TR cases were able to be matched with a DYS case and kept for analysis. Altogether, the total matched-comparison sample (N = 1,303) was represented by a total of 984 unique individuals.

II. RESULTS

The results of the current study are divided into two subsections. First, TR youth sample characteristics are presented. Second, the incarceration rates of the youth who received Targeted RECLAIM services in 2014 and 2015 are compared to matched DYS youth released from DYS custody during the same timeframe. Results of several bivariate and multivariate analyses are also
presented in order to examine rates of recidivism for the TR sample and matched DYS sample by risk level and service type.

**Targeted RECLAIM Sample Characteristics**

The sample used for analysis contained 1,327 youth who were served via a TR-funded program in CY 2014 and/or 2015. Table 1 presents sample characteristics for each service type and for the full TR sample. As can be seen, the majority of youth participated in CBI programs in the community (approximately 63%), followed by a smaller percentage of youth who were served in community residential programs (approximately 24%), and an even smaller percentage of youth who participated in family interventions (approximately 13%). Across all TR participants, the majority were male (approximately 89%) and non-White (approximately 65%). The average age was approximately 16 years old. In line with the goals of Targeted RECLAIM, the majority of youth were referred for a felony offense (75.1%) and were higher risk, with approximately 42% classified as moderate risk and approximately 33% classified as high risk. It is important to note that a number of low risk youth were also served in Targeted RECLAIM programs in 2014 and 2015 (approximately 25%). Of those youth who were referred for a felony offense, approximately 50% were referred for level three or level four offenses (24.9% and 24.4%, respectively), followed by an estimated 20% who were referred for level two offenses. A smaller percentage of youth were referred for level 5 offenses (the least severe), and level one offenses (the most severe) (17.8% and 12.8%, respectively). In line with these results, the majority of youth across each service type were higher risk, non-white males, referred for felony offenses, between the ages of 15 and 16.
<table>
<thead>
<tr>
<th></th>
<th>Community Residential</th>
<th></th>
<th>CBI</th>
<th></th>
<th>Family Interventions</th>
<th></th>
<th>Overall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 316</td>
<td></td>
<td>N = 833</td>
<td></td>
<td>N = 178</td>
<td></td>
<td>N = 1,327</td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>303</td>
<td>95.9</td>
<td>727</td>
<td>87.3</td>
<td>147</td>
<td>82.6</td>
<td>1,177</td>
<td>88.7</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>4.1</td>
<td>106</td>
<td>12.7</td>
<td>31</td>
<td>17.4</td>
<td>150</td>
<td>11.3</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>65</td>
<td>20.6</td>
<td>359</td>
<td>43.1</td>
<td>41</td>
<td>23.0</td>
<td>465</td>
<td>35.1</td>
</tr>
<tr>
<td>Non-White</td>
<td>251</td>
<td>79.4</td>
<td>473</td>
<td>56.9</td>
<td>137</td>
<td>77.0</td>
<td>861</td>
<td>64.9</td>
</tr>
<tr>
<td><strong>Risk Level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>28</td>
<td>8.9</td>
<td>255</td>
<td>31.1</td>
<td>47</td>
<td>26.4</td>
<td>330</td>
<td>25.1</td>
</tr>
<tr>
<td>Moderate</td>
<td>101</td>
<td>32.0</td>
<td>359</td>
<td>43.8</td>
<td>89</td>
<td>50.0</td>
<td>549</td>
<td>41.8</td>
</tr>
<tr>
<td>High</td>
<td>187</td>
<td>59.1</td>
<td>206</td>
<td>25.1</td>
<td>42</td>
<td>23.6</td>
<td>435</td>
<td>33.1</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 to 14</td>
<td>34</td>
<td>10.8</td>
<td>131</td>
<td>15.8</td>
<td>49</td>
<td>27.5</td>
<td>214</td>
<td>16.2</td>
</tr>
<tr>
<td>15 to 16</td>
<td>148</td>
<td>46.8</td>
<td>404</td>
<td>48.8</td>
<td>97</td>
<td>54.5</td>
<td>649</td>
<td>49.1</td>
</tr>
<tr>
<td>17 to 20</td>
<td>134</td>
<td>42.4</td>
<td>293</td>
<td>35.4</td>
<td>32</td>
<td>18.0</td>
<td>459</td>
<td>34.7</td>
</tr>
<tr>
<td><strong>M (SD)</strong></td>
<td>16.0 (1.3)</td>
<td></td>
<td>15.8 (1.4)</td>
<td></td>
<td>15.3 (1.4)</td>
<td></td>
<td>15.8 (1.4)</td>
<td></td>
</tr>
</tbody>
</table>

3 Due to missing data, some totals are less than reported sample size.
Table 1
Descriptive Statistics for TR Youth by Service Type

<table>
<thead>
<tr>
<th></th>
<th>Community Residential</th>
<th>CBI</th>
<th>Family Interventions</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 316</td>
<td>N = 833</td>
<td>N = 178</td>
<td>N = 1,327</td>
</tr>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Offense Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misdemeanor</td>
<td>11</td>
<td>3.6</td>
<td>289</td>
<td>3.6</td>
</tr>
<tr>
<td>Felony</td>
<td>297</td>
<td>96.4</td>
<td>528</td>
<td>64.6</td>
</tr>
<tr>
<td>Felony Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F1</td>
<td>40</td>
<td>13.5</td>
<td>71</td>
<td>13.4</td>
</tr>
<tr>
<td>F2</td>
<td>61</td>
<td>20.5</td>
<td>95</td>
<td>18.0</td>
</tr>
<tr>
<td>F3</td>
<td>82</td>
<td>27.6</td>
<td>122</td>
<td>23.1</td>
</tr>
<tr>
<td>F4</td>
<td>75</td>
<td>25.3</td>
<td>130</td>
<td>24.6</td>
</tr>
<tr>
<td>F5</td>
<td>39</td>
<td>13.1</td>
<td>110</td>
<td>20.8</td>
</tr>
</tbody>
</table>

4 Felony level frequencies and percentages were calculated based on the total number of felony juvenile offenders only.
As Table 1 demonstrated, a substantial number of low risk youth participated in TR programming in 2014 and 2015 (N = 330). Because TR aims to serve higher risk youth and/or youth who were convicted of more serious felony level offenses (F1-3), Table 2 further explores low risk TR youth by offense level and service type. Overall, it can be seen that 33.4% of low risk youth who were referred to TR programming, were adjudicated for a misdemeanor offense. Further, approximately 30% of low risk youth who were referred to TR programming were adjudicated for a lower level felony offense (F4-F5), while a slightly higher percentage of youth who were referred to TR programming (36.9%) were adjudicated for a higher level felony offense (F1-F3).

<table>
<thead>
<tr>
<th>Offense Level</th>
<th>Community Residential</th>
<th>CBI</th>
<th>Family Interventions</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Misdemeanor</td>
<td>2</td>
<td>0.6</td>
<td>105</td>
<td>33.8</td>
</tr>
<tr>
<td>Felony</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F1 – F3</td>
<td>14</td>
<td>4.4</td>
<td>76</td>
<td>23.8</td>
</tr>
<tr>
<td>F4 – F5</td>
<td>11</td>
<td>3.4</td>
<td>65</td>
<td>20.3</td>
</tr>
</tbody>
</table>

**TR & DYS Matched Sample Characteristics & Recidivism Results**

The next set of analyses examine the incarceration rates of youth who received Targeted RECLAIM services and youth released from DYS custody in CY 2014 and/or 2015. Before these

---

5 Offense level information was missing for 10 low risk youth.
recidivism results are presented, however, descriptive characteristics for TR and DYS matched groups are presented.

**Sample Characteristics.** Recall, youth were matched on several pre-treatment characteristics, including gender, race, age at admission, and risk level. As can be seen in Table 3,

<table>
<thead>
<tr>
<th></th>
<th>TR N = 1,303</th>
<th>DYS N = 1,303</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1,160</td>
<td>89.0</td>
</tr>
<tr>
<td>Female</td>
<td>143</td>
<td>11.0</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>451</td>
<td>34.6</td>
</tr>
<tr>
<td>Non-White</td>
<td>852</td>
<td>65.4</td>
</tr>
<tr>
<td>Risk Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>328</td>
<td>25.2</td>
</tr>
<tr>
<td>Moderate</td>
<td>546</td>
<td>41.9</td>
</tr>
<tr>
<td>High</td>
<td>429</td>
<td>32.9</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 to 14</td>
<td>207</td>
<td>15.9</td>
</tr>
<tr>
<td>15 to 16</td>
<td>646</td>
<td>49.6</td>
</tr>
<tr>
<td>17 to 20</td>
<td>450</td>
<td>34.5</td>
</tr>
<tr>
<td>M (SD)</td>
<td>15.8 (1.4)</td>
<td>16.5 (1.2)</td>
</tr>
</tbody>
</table>

who participated in Targeted RECLAIM these groups were observationally similar on all characteristics. Specifically, the majority of youth were male (89% and 90%, respectively), non-
White (65.4% and 66.5%, respectively), between 15 to 16 years of age (49.6%), and classified as moderate risk to reoffend (41.9% and 43.0%, respectively).

**New Incarceration Rates for TR & DYS Matched Samples.** Table 4 presents recidivism (i.e., new incarceration) rates for the Targeted RECLAIM and DYS matched samples. New incarceration rates by level of risk for each group are also presented in Table 4 as well as Figure 1. As can be seen, TR youth were incarcerated at a lower rate overall, compared to DYS youth (4.6% vs. 28.4%, respectively). That is, TR youth were almost 24% less likely than DYS youth to be committed to DYS/DRC.

When examining the findings by risk level, a small difference between TR and DYS low risk youth was found (4.3%; $\chi^2 = 6.0, p \leq 0.01$). Further, sizable and significant reductions in recidivism were found among moderate risk youth. That is, TR moderate risk youth were approximately 22% less likely than DYS youth to be committed to DYS/DRC ($\chi^2 = 103.4, p \leq$

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>TR (N = 1,303)</th>
<th>DYS (N = 1,303)</th>
<th>% Difference</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>10</td>
<td>23</td>
<td>-4.3</td>
<td>6.0**</td>
</tr>
<tr>
<td>Moderate</td>
<td>24</td>
<td>149</td>
<td>-22.2</td>
<td>103.4***</td>
</tr>
<tr>
<td>High</td>
<td>26</td>
<td>198</td>
<td>-40.2</td>
<td>178.7***</td>
</tr>
<tr>
<td>Overall</td>
<td>60</td>
<td>370</td>
<td>-23.8</td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ 0.05, **p ≤ 0.01, ***p ≤ 0.001

TR Youth Totals: Low = 328; Moderate = 546; High = 429
DYS Youth Totals: Low = 314; Moderate = 560; High = 429

---

6 Frequencies were based on weighted estimates.
Finally, high risk TR youth were approximately 40% less likely to be incarcerated in a DYS/DRC facility compared to similarly matched DYS youth ($\chi^2 = 178.7, p \leq 0.001$). Note, these results should be interpreted with caution given the TR sample’s relatively low base rate of reoffending overall (4.6%) and subsequently, across risk levels (e.g., 3% for low risk TR youth and 4.4% for moderate risk youth). The base rate of reoffending was also low for high risk youth (6.0%).

Figure 1
New Incarceration Rates for TR & DYS Matched Samples by Risk Level

Recidivism Rates for TR Youth by Service Type & DYS Matched Samples. Table 5 presents new incarceration rates for TR youth by service type and DYS matched samples. Recidivism rates by level of risk for each group are also presented in Table 5 as well as Figures 2 through 4. As can be seen from Table 5, TR community residential youth were almost 29% less likely than similarly matched DYS youth to be sentenced to DYS/DRC. These results were also demonstrated across levels of risk (see Figure 2). For example, moderate risk TR community
residential youth were almost 19% less likely than moderate risk DYS youth to be sentenced to DYS/DRC ($\chi^2 = 13.1, p \leq 0.001$), while high risk TR community residential youth were 38% less likely than high risk DYS youth to be sentenced to DYS/DRC ($\chi^2 = 69.3, p \leq 0.001$). A significant difference in recidivism rates between low risk TR community residential and low risk DYS youth was not found, however ($\chi^2 = 0.0$).

Figure 2
New Incarceration Rates for TR Community Residential & DYS Matched Samples by Risk Level

![Graph showing new incarceration rates](image)

Related to TR CBI and DYS groups, Table 5 and Figure 3 demonstrate similar results as above. Here, TR CBI youth were almost 22% less likely than DYS youth to be sentenced to DYS/DRC overall. Across each level of risk, these results were confirmed. That is, low risk TR CBI youth were 3.9% less likely than low risk DYS youth to be sentenced to DYS/DRC ($\chi^2 = 4.3$, $p \leq 0.05$), while moderate risk TR CBI youth were approximately 21% less likely than moderate risk DYS youth to be sentenced to DYS/DRC ($\chi^2 = 61.8$, $p \leq 0.001$). High risk TR CBI youth were 42% less likely than high risk DYS youth to be sentenced to DYS/DRC ($\chi^2 = 93.8$, $p \leq 0.001$).
### Table 5
New Incarceration Rates by Risk Level for TR Youth by Service Type & DYS Matched Samples

<table>
<thead>
<tr>
<th></th>
<th>TR Community Residential</th>
<th>DYS</th>
<th>% Difference</th>
<th>χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Low</td>
<td>2</td>
<td>7.1</td>
<td>3</td>
<td>10.7</td>
</tr>
<tr>
<td>Moderate</td>
<td>7</td>
<td>6.9</td>
<td>26</td>
<td>25.7</td>
</tr>
<tr>
<td>High</td>
<td>14</td>
<td>7.5</td>
<td>85</td>
<td>45.5</td>
</tr>
<tr>
<td>Overall</td>
<td>23</td>
<td>7.3</td>
<td>114</td>
<td>36.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>TR CBI</th>
<th>DYS</th>
<th>% Difference</th>
<th>χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Low</td>
<td>7</td>
<td>2.8</td>
<td>16</td>
<td>6.7</td>
</tr>
<tr>
<td>Moderate</td>
<td>16</td>
<td>4.5</td>
<td>91</td>
<td>25.4</td>
</tr>
<tr>
<td>High</td>
<td>11</td>
<td>5.4</td>
<td>103</td>
<td>47.5</td>
</tr>
<tr>
<td>Overall</td>
<td>34</td>
<td>4.2</td>
<td>210</td>
<td>25.8</td>
</tr>
</tbody>
</table>

* Frequencies were based on weighted estimates.
Table 5
New Incarceration Rates by Risk Level for TR Youth by Service Type & DYS Matched Samples

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>TR Family Interventions</th>
<th>DYS</th>
<th>% Difference</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>N = 1</td>
<td>N = 4</td>
<td>8.5</td>
<td>-6.4</td>
</tr>
<tr>
<td></td>
<td>% = 2.1</td>
<td>% = 1.1</td>
<td>% Difference = -6.4</td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>N = 1</td>
<td>N = 31</td>
<td>34.4</td>
<td>-33.3</td>
</tr>
<tr>
<td></td>
<td>% = 1.1</td>
<td>% = 3.4</td>
<td>% Difference = -33.3</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>N = 1</td>
<td>N = 20</td>
<td>48.8</td>
<td>-46.4</td>
</tr>
<tr>
<td></td>
<td>% = 2.4</td>
<td>% = 4.8</td>
<td>% Difference = -46.4</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>N = 3</td>
<td>N = 55</td>
<td>30.9</td>
<td>-29.2</td>
</tr>
<tr>
<td></td>
<td>% = 1.7</td>
<td>% = 5.5</td>
<td>% Difference = -29.2</td>
<td></td>
</tr>
</tbody>
</table>

* \( p \leq 0.05 \), ** \( p \leq 0.01 \), *** \( p \leq 0.001 \)

TR Community Residential Youth Totals: Low = 28; Moderate = 101; High = 187; Overall = 316
DYS Youth Totals: Low = 28; Moderate = 101; High = 187; Overall = 316
TR CBI Youth Totals: Low = 253; Moderate = 358; High = 203; Overall = 814
DYS Youth Totals: Low = 239; Moderate = 358; High = 217; Overall = 814
TR Family Interventions Youth Totals: Low = 47; Moderate = 89; High = 42; Overall = 178
DYS Youth Totals: Low = 47; Moderate = 90; High = 41; Overall = 178
Finally, Table 5 suggests that TR family interventions youth were 29% less likely than DYS youth to be sentenced to DYS/DRC overall. These results were also demonstrated across levels of risk (see Figure 4). For example, moderate risk TR family interventions youth were approximately 33% less likely than moderate risk DYS youth to be sentenced to DYS/DRC ($\chi^2 = 33.8, p \leq 0.001$), while high risk TR family interventions youth were 46.4% less likely than high risk DYS youth to be sentenced to DYS/DRC ($\chi^2 = 23.6, p \leq 0.001$). A significant difference in recidivism rates between low risk TR family interventions and low risk DYS youth was not found, however ($\chi^2 = 1.9$). Notably, all of the results in Table 5 and Figures 2 through 4 should be interpreted with caution, as sample sizes by risk level and recidivism for several TR and DYS subgroups were relatively small.
Further Exploration

The Predictive Validity of the OYAS. While the current study focused on the effectiveness of TR, it is important to note that the findings also suggest that the OYAS is a valid risk assessment system for predicting youth’s likelihood to reoffend (Table 4 and Figure 1). That is, across both TR and DYS groups generally, recidivism rates increased as levels of risk increased. Low risk TR youth were sentenced to DYS/DRC at a lower rate (3%), compared to moderate risk TR youth (4.4%), who in turn were sentenced to DYS/DRC at a lower rate than high risk TR youth (6%). Similarly, low risk DYS youth were sentenced to DYS/DRC at a lower rate (7.3%), compared to moderate risk DYS youth (26.6%), who in turn were sentenced to DYS/DRC at a lower rate than high risk DYS youth (46.2%). Importantly, differences between levels of risk for the TR group were relatively small. Thus, in line with the discussion above, these results should
be interpreted with caution. Similarly, the validity of the OYAS by TR service type could not be explored as sample sizes were too small to allow for reliable estimates.

**Completion Status.** To further explore the positive impact of TR programming, analyses examining the difference in outcomes between youth who successfully completed TR and youth who did not successfully complete TR were conducted. Program completion was defined using the “treatment completion (yes/no)” variable and release date information from each county’s TR tracking form. Youth with missing completion status information were identified and the appropriate county was contacted to help fill in the missing information.

Table 6 presents descriptive statistics related to completion status for all TR youth.\(^8\) The table also presents completion status information by risk level. As can be seen, the majority of

<table>
<thead>
<tr>
<th>Completion Status/Risk Level</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Successful</td>
<td>799</td>
<td>70.6</td>
</tr>
<tr>
<td>Low</td>
<td>202</td>
<td>17.9</td>
</tr>
<tr>
<td>Moderate</td>
<td>328</td>
<td>29.0</td>
</tr>
<tr>
<td>High</td>
<td>269</td>
<td>23.8</td>
</tr>
<tr>
<td>Unsuccessful</td>
<td>332</td>
<td>29.4</td>
</tr>
<tr>
<td>Low</td>
<td>63</td>
<td>5.6</td>
</tr>
<tr>
<td>Moderate</td>
<td>153</td>
<td>13.5</td>
</tr>
<tr>
<td>High</td>
<td>116</td>
<td>10.3</td>
</tr>
</tbody>
</table>

\(^8\) Sixty-one youth were still enrolled in programming at the time of data collection (4.6%); thus, successful/unsuccessful completion status is not reported for these youth.
youth successfully completed TR programming in 2014 and 2015 (approximately 71%), while a smaller percentage of youth unsuccessfully completed TR programming (approximately 29%). Notably, risk levels varied across both groups. In other words, the successful completer group was not made up of only low risk or moderate risk youth, for example. In the same vein, the unsuccessful completer group was not made up of only high risk youth. Instead, 17.9% of successful completers were low risk to reoffend, while 29% were moderate risk, and 23.8% were high risk. Amongst unsuccessful completers, 5.6% were low risk to reoffend, 13.5% were moderate risk to reoffend, and 10.3% were high risk to reoffend.

Table 7 presents recidivism rates for TR youth by risk level and completion status. The results demonstrate that youth who unsuccessfully completed TR were significantly more likely to be incarcerated for a new offense than youth who successfully completed TR ($\chi^2 = 14.5, p \leq 0.001$). The results also demonstrate that recidivism increased as level of risk increased for youth who successfully completed TR programming. Here, low risk completers reoffended at the lowest rate (0.4%), compared to moderate risk completers (1.0%), who in turn, reoffended at a lower rate than high risk completers (1.8%). Conversely, rates of recidivism did not necessarily increase as level of risk increased for unsuccessful completers. Here, low risk unsuccessful completers reoffended at the lowest rate (2.1%), followed by high risk unsuccessful completers (2.4%), followed even further by moderate risk unsuccessful completers (3.9%). Importantly, differences between completion status and levels of risk for the TR group were relatively small. Thus, in line with the discussion above, these results should be interpreted with caution.

---

9 Consistent with the previous analyses, youth who were still enrolled in TR programming at the time of data collection were not included for analysis.
Table 7
New Incarceration Rates by Completion Status & Risk Level for TR Youth (N = 1,131)

<table>
<thead>
<tr>
<th>Completion Status</th>
<th>N</th>
<th>%</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Successful (N = 799)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>3</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>8</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>14</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>Unsuccessful (N = 332)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>7</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>13</td>
<td>3.9</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>8</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>53</td>
<td>4.7</td>
<td>14.5***</td>
</tr>
</tbody>
</table>

$^* p \leq 0.05$, $^** p \leq 0.01$, $^*** p \leq 0.001$

III. SUMMARY, LIMITATIONS, & RECOMMENDATIONS

The current study was designed to evaluate the effectiveness of the Targeted RECLAIM initiative in Ohio. The following section provides a summary of the current study, discusses its limitations, and offers several conclusions and recommendations for DYS to improve TR programs and implementation efforts across the state.

Summary of the Findings

The results of the study, coupled with the continued expansion of the RECLAIM initiative in Ohio, suggest that Targeted RECLAIM is an effective justice reinvestment strategy and way for the state to reduce youth recidivism and maintain public safety. Even when considering pretreatment characteristics of gender, race, age at admission, and risk level, the results showed that youth who participated in Targeted RECLAIM programs reoffended less than similarly
matched youth who were released from DYS. Reductions in recidivism were also found across TR service types, suggesting that residential, CBI, and family interventions provided in the community are effective strategies on their own to reduce the risks and needs of youth involved in the juvenile justice system.

Further exploration of the findings suggest that the OYAS is a valid risk assessment system for predicting youth’s likelihood to reoffend. In addition, the study found that the majority of youth successfully completed TR programming in 2014 and 2015. Completion status, in turn, proved to be a significant predictor of future recidivism. That is, youth who successfully completed TR were significantly less likely than youth who unsuccessfully completed TR to be incarcerated for a new offense.

**Limitations**

While efforts were made to address all relevant concerns regarding the collection and analysis of these data, there were several limitations that could not be addressed. These limitations are discussed in detail below and provide important insight on how future research examining the effectiveness of TR may be expanded and improved upon.

**Data Collection.** First, data oftentimes were collected and submitted in different ways across counties which posed several challenges. Missing data, submission of inaccurate program admission and/or completion dates, and data duplication were some of the issues that arose over the course of the study, for example. One of the biggest areas of concern, even further, was related to the manner in which particular subsidy codes and/or program categories on the TR youth tracking form were defined across sites. Creating consistency across these codes and categories was important, as the researchers used them to collapse TR programs into service types (i.e., community residential, CBI, and family interventions). Likewise, consistency in youth program
completion status was important to ensure the findings for the “Further Exploration: Completion Status” section of the current report were reliable. Sites were fairly consistent in how they defined “successful completer” and “unsuccessful completer”; however, they tended to vary in how they used the “neutral” completion status category. Upon further examination of the data during the data cleaning process, it appeared that the majority of the youth who were identified as “neutral” program completers were actually un成功fully terminated from the program, based on the reason the county provided for their program termination.

Method. Second, there were several limitations related to the methodology of the study. The comparison group, for example, only included youth released from DYS custody. That is, the study did not examine the effectiveness of TR in comparison to youth who were supervised on probation and/or sentenced to a community correctional facility (CCF). Thus, generalizability of the samples to all juveniles under supervision across the Ohio juvenile justice system is not feasible (i.e., the findings may not be representative of all juvenile offenders across the state).

Also, as mentioned several times throughout the current report, the results of the study should be interpreted with caution due to low base rates of reoffending. When examining recidivism results by risk level for TR youth, sample sizes were especially small (e.g., only 10 out of 328 low risk TR youth reoffended, while 24 out of 546 moderate risk TR youth reoffended). A small number of low risk comparison group youth also reoffended (23 out of 314).

In addition, only youths’ initial involvement or first exposure to a Targeted RECLAIM program was examined. The evaluation of TR in light of youths’ participation in multiple TR services may help to better understand a dose-response relationship between intensity of services and future recidivism in TR youths. Similarly, while we were able to examine TR’s effectiveness by service type (i.e., community residential, CBI, and family interventions), we were unable to
stratify and conduct unique analyses by program type (e.g., T4C, EPICS, CBI Skills, MST, HFWA) because of sample size limitations.

Finally, more rigorous matching procedures, such as nearest neighbor matching without replacement and/or controlling for relevant factors such as referring county may have produced more robust findings. However, the current study advances prior evaluations (e.g., Spiegel, Schweitzer, & Latessa, 2015; Labrecque & Schweitzer, 2013) by including youth who received services over multiple years (2014 and 2015).

Outcome Measures. Finally, the outcome measure in the current study only included new commitments to a DYS and/or DRC facility. It did not include, for example, new arrests, new adjudications, and/or technical violations which could provide further insight on the effectiveness of TR.

Recommendations

Based on the results of the current study, several recommendations can be made. These recommendations are summarized below.

- While TR services provided in the community are more beneficial than custodial placement, UCCI recommends that DYS and TR counties continue to monitor the number of low risk youth admitted to TR programs. It is especially important that DYS and the counties monitor the number of low risk youth admitted to TR programs who were adjudicated for unruly and misdemeanor offenses, as well as lower level felony offenses (F4-F5).

- Related, DYS and TR counties are encouraged to revise and/or review their assessment processes and procedures to ensure fidelity to the tools and reliability to youths’ assessment results. Specifically, DYS should continue to encourage counties to:
  
  (1) Use the OYAS instrument that is most appropriate for the youth based on the stage in which he/she is involved in the juvenile justice system (e.g., probation, reentry); and

  (2) Match services to the criminogenic needs and risk levels of all youth. The courts should use the least restrictive means necessary for low risk youth who may only have one or two barriers and/or criminogenic needs. Even further, low risk
youth who do not have any identified barriers and/or criminogenic needs should be completely diverted from the juvenile justice system (i.e., no services or supervision should be provided to these youth).

Following these steps will subsequently ensure that youth who are being placed in TR programs are, in fact, higher risk to reoffend, and thus, in need of more intensive services.

- With regard to programming, DYS should continue to ensure TR services support behavior change and adhere to evidence based practices. Specifically, TR counties and the staff who provide treatment should be trained to use core correctional practices, attend advanced booster trainings, and target criminogenic need areas using evidence-based and/or evidence-informed approaches. The majority of program components should be behavioral in nature with a focus on cognitive restructuring, role play and practice, demonstration, and feedback. Staff should work to monitor the program to ensure it is delivered with fidelity. They should also receive coaching from UCCI and/or CWRU staff on how to improve service delivery skills.

- Finally, UCCI highly encourages DYS and TR counties to work with quality assurance providers to revise and/or review the data collection process to ensure consistency. Decision rules on how to record youth who receive multiple services and the types of services youth receive should be reviewed, for example. These efforts will improve the quality of the data collected at the agency level as well as support future research projects related to the TR initiative as a whole.
REFERENCES


# APPENDIX A–TARGETED RECLAIM SERVICES BY COUNTY

<table>
<thead>
<tr>
<th>County</th>
<th>Program Name</th>
<th>Primary Intervention(s)</th>
<th>Service Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen</td>
<td>Juvenile Treatment Center</td>
<td>A.R.T.®, T4C; CBI Skills Groups</td>
<td>Residential</td>
</tr>
<tr>
<td>Ashtabula</td>
<td>Ashtabula County Juvenile Court</td>
<td>EPICS; T4C; ART</td>
<td>CBI</td>
</tr>
<tr>
<td>Butler</td>
<td>Butler County Juvenile Court</td>
<td>T4C; EPICS</td>
<td>CBI</td>
</tr>
<tr>
<td></td>
<td>Community Based Treatment Center</td>
<td>CBI Skills Groups</td>
<td>Residential</td>
</tr>
<tr>
<td>Cuyahoga</td>
<td>Girls Day Treatment</td>
<td>CBI Skills Group</td>
<td>Residential</td>
</tr>
<tr>
<td></td>
<td>Cuyahoga County Juvenile Court</td>
<td>MST</td>
<td>Family Interventions</td>
</tr>
<tr>
<td>Franklin</td>
<td>Central Ohio Youth Center</td>
<td>CBI Skills Groups</td>
<td>Residential</td>
</tr>
<tr>
<td></td>
<td>Franklin County Juvenile Court</td>
<td>MST</td>
<td>Family Interventions</td>
</tr>
<tr>
<td></td>
<td>Hillcrest Academy</td>
<td>A.R.T.®, T4C; CBI-SA</td>
<td>Residential</td>
</tr>
<tr>
<td>Hamilton</td>
<td>Lighthouse Youth Center</td>
<td>A.R.T.®, T4C; CBI Skills Groups</td>
<td>CBI</td>
</tr>
<tr>
<td></td>
<td>Lighthouse Youth Center–Paint Creek</td>
<td>CBI Skills Groups</td>
<td>Residential</td>
</tr>
<tr>
<td>County</td>
<td>Program Name</td>
<td>Primary Intervention(s)</td>
<td>Service Type</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Licking</td>
<td>Licking County Juvenile Court</td>
<td>EPICS/Sex Offender Wraparound</td>
<td>CBI(^{10})</td>
</tr>
<tr>
<td>Lorain</td>
<td>Lorain County Juvenile Court</td>
<td>A.R.T.(^{\circledR}); T4C; Strengthening Families; MST</td>
<td>CBI; Family Interventions</td>
</tr>
<tr>
<td>Lucas</td>
<td>Reentry Treatment Center</td>
<td>1:1 CBI Skills Sessions</td>
<td>CBI</td>
</tr>
<tr>
<td></td>
<td>Community Treatment Center</td>
<td>A.R.T.(^{\circledR})</td>
<td>CBI</td>
</tr>
<tr>
<td>Medina</td>
<td>Medina County Juvenile Court</td>
<td>MST</td>
<td>Family Interventions</td>
</tr>
<tr>
<td>Mahoning</td>
<td>Mahoning County Juvenile Court</td>
<td>T4C; HFWA</td>
<td>CBI; Family Interventions</td>
</tr>
<tr>
<td>Montgomery</td>
<td>Juvenile Court Alternative Rehabilitation Effort</td>
<td>A.R.T.(^{\circledR}); Sex Offender Pathways</td>
<td>Residential</td>
</tr>
<tr>
<td>Stark</td>
<td>Stark County Juvenile Court</td>
<td>T4C</td>
<td>CBI</td>
</tr>
<tr>
<td>Summit</td>
<td>Summit County Juvenile Court</td>
<td>T4C; CBI-SA</td>
<td>CBI</td>
</tr>
<tr>
<td>Trumbull</td>
<td>Trumbull County Juvenile Court</td>
<td>T4C; MST; HFWA</td>
<td>CBI; Family Interventions</td>
</tr>
</tbody>
</table>

\(^{10}\) Licking County provides EPICS and HFWA to youth on probation. All services were coded as cognitive behavioral interventions in the community.