Massachusetts Department of Correction Three-Year Recidivism Study: A Descriptive Analysis of the January – July 2011 Releases and Correctional Recovery Academy Participation

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Definition of Terms

Board of Probation: The court activity record information (CARI) file provides criminal history information starting with each arraignment. The Massachusetts Board of Probation (BOP) maintains the CARI file on the Massachusetts Criminal Justice Information System (CJIS).

Correctional Recovery Academy: An intensive, six month, skill-based residential substance abuse treatment program.

Governing Offense: The offense associated with the longest maximum discharge date when there are multiple offenses per inmate.

Length of Incarceration: For the purposes of this report, time served is calculated using the offender's incarceration and release dates. For inmates who were serving a state prison sentence, jail credits are included in the calculation.

Nonviolent Offense: Any offense that falls under the categories of property, drug, or "other."

Parole Violation: An act or failure to act by a parolee that does not conform to the conditions of parole related to having been arrested for a new offense.

Recidivist: For the purposes of this report a recidivist is defined as any offender in the study cohort who is reconvicted within three years of their release to the street from a Massachusetts Department of Correction facility to include a new criminal sentence, probation, suspended sentence, fine, guilty finding, or continued without a finding (CWOF). The follow-up period is based on the initial arraignment date for the charge resulting in a new conviction.

Recidivism Rate: The recidivism rate is calculated by dividing the number of offenders re-convicted within three years of release by the number of offenders in the release cohort.

Recidivism Risk Score: On intake to the prison system each inmate is given assessments to establish their Intake/Criminal History/Risk Scale Set. Components of the scale set are the General and Violent Recidivism Risk Scores which may be used to predict recidivism risk. The risk scores are based on a COMPAS Core scale which is a standard decile scale with 1 corresponding to the lowest risk of recidivism and 10 corresponding to the highest risk. The amount of programming required for a given inmate is established by further simplifying this scale to Low, Moderate, and High recidivism risk inmates. Offenders scoring a moderate to high risk to recidivate in either the general or the violent recidivism scale are administered a Needs Assessment and the offender referred for programming. The offender's most recent risk assessment data was used prior to their release to the street. Due to the implementation of the COMPAS Assessment, offenders who were incarcerated at the time of the roll-out were administered a Standing Risk Assessment as a proxy to the Initial Risk or Core Risk Assessment. Those assessment scales are used interchangeably in the analysis.

Security Level: The security level designation of the facility the offender was released from.
For facilities with multi level designations, the security level of the housing unit the offender was released from within the facility was used.

Violent Offense: Any offense that falls under crimes against the person or a sex offense category.

Executive Summary

Research has shown drug treatment for drug involved offenders is effective in lowering the rates of recidivism (Mackenzie, 2006; Sherman, et al, 2002; MADOC, 2009). The focus of this study was to identify and describe differences in the recidivism rates[1] of offenders who participated in the Massachusetts Department of Correction (MADOC) Correctional Recovery Academy (CRA) program to determine if expected decreases in recidivism could be noted for this population. CRA is an intensive six month skill-based residential substance abuse treatment program. There are a total of 528 residential treatment beds located across four separate MADOC institutions. The CRA targets substance abuse, anger management, criminal thinking, and relapse prevention utilizing a therapeutic community social learning approach with an advanced cognitive behavioral curriculum that promotes positive social learning.

Key findings

- Of the 406 offenders included in the CRA recidivism study, the overall three-year recidivism rate was 50.7%.
- Offenders who completed the CRA program prior to their release to the street had a three-year (conviction) recidivism rate of 46.9%, while the non-completer recidivism rate was 52.9%. This represents an 11.3% decrease in the rate of recidivism.
- On average, offenders who did not recidivate had more money in their bank account prior to release and served a slightly longer sentence than recidivists.

Introduction

How recidivism is conceptualized and how an inmate population is targeted can drastically influence a reported recidivism rate. Common definitions for recidivism include: the re-committing of a crime; the reconviction of a crime; or the re-incarceration to jail or prison after release to street following an incarceration.

The follow-up period for relapse into the specified behavior depends on the study and how recidivism is being defined. For example, using a one-year follow-up of *reincarceration*, the recidivism rate for offenders released to the street from a Massachusetts Department of Correction (MADOC) facility during 2010 was 21%, compared to a three-year *reincarceration* rate of 39% (Massachusetts Department of Correction, December 2014).

According to the study by the Pew Center for the States, recidivism is the act of reengaging in criminal offending despite having been punished. Typically, recidivism studies follow released offenders for three years following their release from prison or placement on probation. Offenders are returned to prison for one of two reasons: for committing a new crime that results in a new conviction, or for a technical violation of supervision, such as not reporting to their parole or probation officer, or failing a drug test (Pew, 2011, pg. 7).

For the purposes of this report, recidivism was defined as a reconviction occurring within three years from the date of an inmate's release to the street. Conviction types include a criminal sentence to a Massachusetts state or county facility, probation term, suspended sentence, split sentence, fine, guilty finding, or continuance without a finding (CWOF).

A primary objective of MADOC is to rehabilitate offenders and prepare them for successful re-entry into society. Offenders are assessed and those identified as being the highest risk offenders are enrolled in programs designed to target their specific criminogenic need areas with the goal of deterring future

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[1] The recidivism rate is calculated by dividing the number of offenders re-convicted by the number of offenders in the release cohort.

criminality. To measure success offender recidivism rates are used to determine an offender's ability to abstain from criminal behavior after release from prison.

When an offender transitions from prison to the community they often face obstacles known to be associated with: higher rates of criminality; substance abuse (Travis & Visher, 2006); unstable living arrangement or homelessness (Halsey 2007; Grunwald et al, 2010); releasing to neighborhoods where known associates have delinquent attitudes or behaviors (Megens and Weerman 2011;); or returning to area of low economic opportunities (Weiman 2007). Mental health issues are also a concern as correctional facilities across the country are managing a growing number of offenders with mental health disorders. On January 1, 2011, MADOC had 22% of males and 63% of females with an open mental health case and 17% of males and 56% of females on psychotropic medication (Massachusetts Department of Correction, 2012).

Over the last decade, MADOC has placed greater emphasis on program services as a tool for reducing recidivism and enhancing public safety. Utilizing the best available research, we are able to address the root causes of criminal behavior through highly focused programming while measuring each offender's individual progress using evidence-based actuarial risk/needs assessments.

The cornerstone of our program services is the Risk, Need, and Responsivity (RNR) framework. The RNR is predicated on three core principles:

- **The Risk Principle** asserts that criminal behavior can be reliably predicted, intensity of services should match the offenders' risk level and treatment should focus on the higher risk offenders;
- **The Need Principle** highlights the importance of addressing criminogenic needs in the design and delivery of treatment; and,
- **The Responsivity Principle** focuses on matching an offender's personality and learning style with appropriate program settings and approaches (Andrews, Zinger, Hoge, Bonta, Gendreau & Cullen, 1990; Andrews and Dowden, 2005; Andrews and Dowden, 2006).

This framework focuses correctional treatment on addressing *criminogenic needs*: factors that impact criminal behavior that can be altered over time with appropriate treatment. While offenders have many needs deserving of treatment, we know from extensive research in the field that not all of these needs can be changed. For example, an offender may have a lengthy criminal record from crimes committed while under the influence of illicit drugs. We focus on addressing criminal thinking and substance abuse as they can be changed with appropriately targeted services. Disregarding offenders' major needs has been proven through extensive research to actually increase their chances of recidivating (Andrews and Bonta, 2006). Other criminogenic needs include: employment and pro-social networks/associations, education, and stable housing and home life (Andrews and Bonta, 2006).

Substance Abuse Treatment Programming

According to a 2003 report by the National Center on Addiction and Substance Abuse at Columbia University, 80 percent of all offenders in the U.S. criminal justice system report having substance abuse problems. Reports funded by the National Institute of Justice and the National Institute on Drug Abuse found that substance abusing inmates who completed treatment were less likely to relapse to drug use and less likely to be rearrested after release (Harrison and Martin, 2003; NIDA, 2009). Congress established the Residential Substance Abuse Treatment (RSAT) program in 1994 to help state correctional systems implement comprehensive approaches to substance abuse treatment that included residential treatment, life skills development, vocational training, relapse prevention, and aftercare services. RSAT programs help addicted offenders return to society substance free and armed with skills to obtain employment and be productive members of their communities (Schmidt, 2001; Gonzales, Henke & Herraiz, 2005) This, in turn, nets huge savings in societal costs (NIDA, 2009).

The RNR model has been extolled as a best practice model for corrections (Taxman, 2006) and was shown to effectively reduce recidivism by as much as 35 percent (Bonta and Andrews, 2007). The RNR model influenced the development of offender risk/needs assessment instruments to accurately measure changes in offenders' risk to recidivate (Arnold, 2007; Motiuk, Bonta & Andrews, 1990; Raynor, 2007; Raynor, Kynch, Roberts & Merrington, 2000). Through evidence-based risk/needs assessments, the MADOC can calculate the effectiveness of its programs on a regular basis and implement responsive quality improvements. By providing program services rooted in the RNR model, MADOC promotes offenders' successful reintegration into the community and significantly reduces the impact of recidivism on public safety.

In 1993, MADOC demonstrated its commitment to providing state-of-the-art, evidence-based treatment for offenders by opening six residential substance abuse treatment programs (Correctional Recovery Academy) using a modified therapeutic community model. This model was based on the work and research of De Leon and Ziegenfuss (1986), Yablonsky (1986), and other premier researchers in the industry. A modified therapeutic community provides a safe, structured environment for social learning while clinically treating addictions and other contributing factors for criminal behavior.

As substance abuse research evolved, MADOC has kept pace by enhancing the CRA with the latest evidence-based curricula in the areas of Criminal Thinking and Violence Reduction in 1996. These curricula were developed by the Armstrong Associates and were adopted nationally by the Canadian prison system and many departments of correction in the United States.

MADOC continued to stay current with recent evidence-based practices in substance abuse treatment with enhancements to the CRA by expanding to eight facilities in 2003, replacing selected curricula, and introducing new topics based on research by the Harvard School of Public Health, the National Institute on Drug Addiction, The Texas Christian University, and notable researchers such as Thomas D'Zurilla and Marvin Goldfried. In 2009, MADOC further enhanced the CRA by providing improved treatment matching with the implementation of the COMPAS assessment tool. The Department also enhanced the therapeutic community design of the CRA by combining elements of a therapeutic community's social learning approach with an advanced cognitive behavioral curriculum.

It is important to note that the focus of this analysis is a group of offenders whom may have participated in a version of the CRA Program which was much different than the program in place today. As described above the CRA has evolved over time. That evolution has been informed by the insights from this report and other empirical research to more closely align the treatment model with evidence based practices. This report is one example of the MADOC data driven approach to decision making.

Methodology

The goal of these analyses is to explore MADOC recidivism rates in reference to the CRA and its associated qualification assessments: substance abuse risk, general risk, and violent risk. The data and its analyses are purely descriptive in nature due to a small cohort size and relatively small effect size making definite statistical significance difficult to achieve. However, due to the marginal significance of the data and the utilization of only seven months (Jan-July) of 2011 releases, future analyses could offer a more robust data set and thus be capable of more definitive results.

Each inmate given a general or a violent recidivism risk score is placed in a category score ranging from 1 (lowest risk) to 10 (highest risk) based on decile cut-points determined by an established, evidence-based norm group. Dependent on this 10-point scale, each offender is then placed into one of three recidivism risk categories, Low (score 1-4), Moderate (score 5-7), and High (score 8-10). Offenders considered ideal for referral to the Correctional Recovery Program are those who score moderate to high risk using the COMPAS general risk and violent risk scores who also score moderate to high in the substance abuse

scale in the COMPAS needs assessment[2]. This offender substance abuse scale is categorized ranging from 1 to 10 based on decile cut points and then categorized into low (1-2), moderate (3-4) and high (5–10) based on 20/20/60 cut points determined by a substance abuse norm group. The three-year recidivism rates for inmates identified as candidates for referral to the CRA program released during the first seven months of 2011 were analyzed and compared to describe differences in CRA program completers and non-completers/non-participants.

Cohort selection included male offenders released January through July, 2011, appropriate for recommendation for the CRA program by scoring moderate to high in the substance abuse scale of the COMPAS needs assessment. The focus was limited to male releases as availability of risk score data for the 2011 releases was limited for the female population. Overall, there were 790 male offender releases to the street from that period 2011 identified to have a completed a calculated Intake or Standing Population Risk Assessment. Of these, 632 were identified as moderate to high risk based on associated 40/30/30 (Low/Moderate/High risk) cut points. Of these 632[3] mod/high risk offenders, 406 (64%) were identified as scoring moderate to high in the Substance Abuse Scale in the Needs Assessment based on 20/20/60 (Low/Moderate/High) cut points and identified for the final study cohort.

The CRA program participation data was merged into the cohort data file of January through July 2011 releases to the street. This CRA data was gathered from MADOC Inmate Management System (IMS) and represented offenders whom completed CRA. The CRA data was sorted to identify offenders in the study cohort who completed the CRA program as indicated by a termination reason of 'Completed Successfully' for identified CRA program types and flagged with their most recent completion date. Recidivism rates for program completers and non-completers/non-participants were used in the descriptive analysis of the CRA program.

For this report, the follow-up timeframe for a recidivist was based on the initial arraignment date for the new charge that resulted in a new conviction. Though there was a three-year timeframe for recidivism, additional follow-up time is necessary when collecting reconviction data to allow for arraignments to reach a final decision.

Cohort Overview

The final cohort consisted of 406 criminally sentenced offenders who were released to the street during the first seven months of 2011. The following overview reflects those 406 released offenders.

- Of the study cohort, 56.2% were under parole or probation supervision upon release, nominally higher than the overall male population for that period of 53.8%.

- Racially the release cohort consisted of 45.1% White, 31.0% Hispanic, 22.9% Black, and less than one percent Native American or Other races.

- The majority of the cohort (53.2%) was serving a non-violent[4] governing offense.

- The cohort consisted of 52.0% medium security inmates at release, 17.7% in pre-release, 16.7% in minimum, and 13.5% maximum.

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[2] Of the 632 moderate to high risk offenders, 129 were not administered a COMPAS Needs Assessment. For those 129 offenders, the Substance Abuse Scale Set in the offender Risk Assessment was used to determine a substance abuse score.

[3] Of the 632 mod/high risk offenders, 129 were not administered a COMPAS Needs Assessment. For those 129 offenders, the substance abuse scale score from the Risk Assessment was used.

[4] The Non-Violent offense category includes drug, property, and 'other' offenses, while the Violent offense category includes person and sex offenses.

- The median age at release for both CRA completers and non-completers within the cohort was 36 years.

- The median time served[5] for the cohort was 3.06 years. CRA completers had a longer median time served, 3.76 years, compared to non-CRA completers, 2.93 years.

Results

The recidivism findings for the 406 offenders in the CRA study cohort revealed an overall recidivism rate of 50.7%. A comparison of CRA program participants who successfully completed the program compared to CRA non-completers/non-participants saw associated three-year recidivism rates of 46.9% and 52.9%, respectively. This six-percentage point difference equated to an 11.3% percent lower recidivism rate for CRA participants compared to non-participants/completers[6]. At the end of the first year of follow up, CRA completers had a lower rate of recidivism than did non-completers; during the second and third years, the rates of recidivism for the two groups was comparable. This observation may reflect a fall off of the CRA treatment effect post-release – speaking to the need for a continuum of care post-release.

These findings were similar to prior research that indicated a 10-20% expected reduction in recidivism rates with the use of effective evidence based programming (Sherman, et al, 2002, in MADOC, 2009). Additionally, recent work by the MA DOC with the Pew-MacArthur Results First Initiative estimated that modified therapeutic drug community treatments, such as CRA, have an expected recidivism reduction of 13.9%; similar to the above finding (EOPSS, 2014).

Reconviction Recidivism by Year and CRA Completion Status

CRA Completion	Non-Recidivist		Year One Recidivists		Year Two Recidivists		Year Three Recidivists		Total Recidivists	
	N	%	N	%	N	%	N	%	N	%
Completed	77	53.1%	31	21.4%	24	16.6%	13	9.0%	68	46.9%
Not Completed	123	47.1%	72	27.6%	45	17.2%	21	8.0%	138	52.9%
Total	200	49.3%	103	25.4%	69	17.0%	34	8.4%	206	50.7%

Release supervision (defined as parole, probation, or both parole and probation) can have a significant effect on whether an offender recidivates or not. Overall, offenders released without supervision had a higher reconviction recidivism rate than offenders with supervision, at 55.6% and 46.9%, respectively. It is important to note that offenders under supervision (of any sort), may violate their conditions and be reincarcerated without being convicted of a new crime; these offenders were not included in the analysis.

Offenders released with supervision who completed the CRA program, had a recidivism rate of 42.0%. Offenders who completed the CRA and were released to the street without supervision had a recidivism rate of 49.7%, while offenders released without supervision whom did not complete the CRA program had a rate of 57.0%

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[5] Time Served is the time an inmate serves in state custody, calculated by finding the difference between any release and admission dates then adding to that any jail credits.

[6] To obtain the percent difference, the difference between the two percentages are divided by the average of the two percentages.

Three Year Reconviction Recidivism Rates of CRA Completion and Supervision Upon Release

Supervision Upon Release	CRA Non-Completion			CRA Completion			Total		
	N Released	N Rec	Rec Rate	N Released	N Rec	Rec Rate	N Released	N Rec	Rec Rate
No Supervision Upon Release	114	65	57.0%	64	34	53.1%	178	99	55.6%
Supervision Upon Release	147	73	49.7%	81	34	42.0%	228	107	46.9%
Total Releases	261	138	52.9%	145	68	46.9%	406	206	50.7%

Another variable which can influence an inmate's probability of recidivating is his/her security level at release. Offenders released from a minimum or pre-release facility had lower recidivism rates than offenders released from maximum or medium security with rates of 43.6% and 54.5%, respectively.

Offenders released from maximum or medium security and who completed the CRA program had a recidivism rate of 50.0% compared to similar security-level, CRA non-completers with a rate of 57.1%. Offenders who completed the CRA program and were released from a minimum/pre-release facility had a recidivism rate of 40.8%, compared to CRA non-completers with a rate of 45.1%.

Three Year Reconviction Recidivism Rate by CRA Completion Status and Security Level of Releasing Facility

Security Level	Non-Completion			CRA Completion			Total		
	N Released	N Rec	Rec Rate	N Released	N Rec	Rec Rate	N Released	N Rec	Rec Rate
Maximum/Medium Security	170	97	57.1%	96	48	50.0%	266	145	54.5%
Minimum/ Pre-release Security	91	41	45.1%	49	20	40.8%	140	61	43.6%
Total	261	138	52.9%	145	68	46.9%	406	206	50.7%

The effect of whether an inmate had a violent (person or sex) governing offense versus a non-violent (property, drug, or other) offense is examined below. Overall, these rates were similar with violent offenders having a 51.1% recidivism rate and non-violent offenders having a 50.5% rate. Amongst violent governing offenders, there was a 16.2% between CRA completers (57.3%) and non-completers (41.1%). For non-violent offenders the CRA completers had a three-year, reconviction recidivism rate of 52.8% while non-violent offenders had a recidivism rate of 49.3%.

Three Year Reconviction Recidivism Rates of CRA Completion and Violent Governing Offense

Violent Offense	Non-Completion			CRA Completion			Total		
	N Released	N Rec	Rec Rate	N Released	N Rec	Rec Rate	N Released	N Rec	Rec Rate
Non Violent	144	71	49.3%	72	38	52.8%	216	109	50.5%
Violent	117	67	57.3%	73	30	41.1%	190	97	51.1%
Total	261	138	52.9%	145	68	46.9%	406	206	50.7%

State of the Program

The MADOC is committed to improving outcomes associated with the implementation of evidence based programs with current focus placed in three specific strategies: improving program fidelity, increasing program participation for appropriate offenders, and promoting the continuum of care into the community.

Improve Program Fidelity:
- Integrated Case Management (ICM) Training
    - ICM provides staff with techniques and tools to motivate and engage offenders to be active participants in their own recovery and reentry
- Improved recruitment, retention, and training for CRA staff
- Implemented training and team building activities to clearly define roles and expectations
    - Led to the formation of more integrated interdisciplinary teams working toward the singular goal of improving the overall quality of the program
    - Promoted a shift in culture that embedded the program within the mission of each institution
    - Improved work environments and reports of increased job satisfaction
- Increased presence from Central Headquarters Staff at CRA units to provide support, monitor program fidelity and leverage additional commitment and institution based resources.

Increase the number of offenders with a substance abuse need that complete the CRA program:
- The Texas Christian University Drug Screen II (TCU-DII)
    - The Texas Christian University Drug Screen II (TCU-DII) is administered at MCI-Framingham and MCI-Cedar Junction to assess the substance abuse need of the inmate at admission.
    - This score further indicates substance abuse programming eligibility of the inmate in addition to one's risk and need scores.
- Program Engagement Strategy (PES)
    - PES introduces a balanced approach of incentives and consequences for program participation
    - PES allows offenders to choose between receiving or removing privileges, such as preferential housing, work assignments, and unit seniority, when being asked to be accountable towards completing programming
- Expansion of available CRA treatment beds in minimum security
- Improved data collection for tracking program participation with the development of the case plan within the Inmate Management System (IMS)
- Publication of quarterly Gap Analysis Report
    - Captures programming gaps, provides benchmarks, and promotes transparency
- Strategic planning geared towards reducing the gap of offenders with a substance abuse need that release without completing CRA
- Collaboration between Classification and Program Services Division to ensure offenders with a substance abuse need have an opportunity during their incarceration to participate in the CRA
    - Offenders with substance abuse need that did not complete CRA are being identified and referred to Classification Division for a review and potential transfer to a facility with CRA

Promote Continuum of Care (Post-Release):
- Medication Assisted Treatment Reentry Initiative (MATRI) and Reentry Navigators
    - Provides pre-release treatment and post-release referral for opioid and/or alcohol addicted offenders
    - Facilitates transition into an outpatient substance abuse treatment program
- Partnerships with House of Corrections to step-down offenders within the geographic area of release
- Collaborating with community based case management agencies to strengthen the continuum of care post-release

- o MA DOC recognizes the importance of offenders engaging in supportive case management services post-release to enhance treatment effects and reduce recidivism

Conclusion

Overall, this study revealed a lower recidivism rate for CRA completers compared to non-completers who were identified as having the same substance abuse intervention needs. The results are promising and consistent with the findings of meta-analyses of similar evidence based programming. This report represents the initial analysis of the Correctional Recovery Academy based on the availability of data at that time. As our data collection and analysis processes have become more sophisticated, more comprehensive research will be undertaken to further evaluate the benefits of the CRA program.

This study took a descriptive look at offenders assessed with a moderate to high substance abuse need area and the associated recidivism rates for that population based on participation in the Correctional Recovery Academy (CRA) Program. The study highlighted some interesting findings regarding recidivism rates and CRA participation with focus placed on a number of demographic, sentencing, release, and reentry variables. While preliminary, this study helped set criteria for the study population and included related academic studies to bolster the findings.

This study detailed the important role of the RNR model and the continuum of treatment from prison to the community in recidivism reduction. The automated case management process successfully links an offender's risk/need assessment results to the development of a personalized program plan. This process has provided staff with the tools necessary to more fully integrate case management with a focus on motivational interviewing as the primary mechanism for program referral and enrollment. This process helps ensure that offenders are being referred to programs consistent with their criminogenic need areas.

The Massachusetts Department of Correction continues to work diligently to perfect a reentry continuum that incorporates evidence based practices and partnerships with internal and external stakeholders. The findings of this study reflect the promising impact such programs can have on reducing recidivism. By ensuring fidelity when implementing evidence-based programming and building on the ability to evaluate the success of reentry initiatives MADOC shows the insight and the ability to bolster programs such as the Correctional Recovery Academy with the singular goal of public safety and reducing recidivism.

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