One-Year Recidivism Rates of Male Releases 2013 – 2019: A Multi-Year Descriptive Analysis of Correctional Recovery Academy and High School Equivalency Credential

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Definition of Terms

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

COMPAS: Correctional Offender Management Profiling for Alternative Sanctions is an automated risk/needs assessment tool utilized to inform the development of an inmate's personalized program plan. COMPAS has been normed and validated to the Massachusetts Department of Correction population.

Correctional Recovery Academy: Is an intensive 6-month substance use program currently located at four institutions: Northeastern Correctional Center, MCI-Norfolk, MCI-Shirley, and MCI-Concord. CRA targets relapse prevention and cognitive behavioral programming. The program utilizes rolling admission and combines elements of a therapeutic community's social learning approach with an advanced cognitive behavioral curriculum.

Electronic Monitoring Program (ELMO) – As stated in the 103 DOC 468 policy, ELMO is a program which promotes reentry by maximizing an inmate's time in the community prior to release, thereby allowing the inmate to demonstrate their ability to function in a realistic living environment while monitored under strict conditions of accountability.

Governing Offense: The offense associated with the sentence imposing the longest maximum discharge date when an inmate is convicted and sentenced for multiple offenses.

High School Diploma or Equivalent (General Equivalency Diploma, High School Equivalency Test): Education level associated with inmates with a verified High School Diploma, or High School Equivalency Credential, or those who earned a High School Equivalency Credential during their incarceration.

Non-Violent Offense: Any offense that falls under the categories of "Property", "Drug", or "Other."

Program Fidelity: The extent to which delivery of an intervention adheres to the protocol or program model originally developed. The Program Fidelity measurement has increasing significance for evaluation, treatment effectiveness research, and service administration.

Race/Ethnicity: Inmates are asked to self-report their race and ethnicity. The recorded categories are in accordance with 501 CMR 18.00, Data Collection and Reporting Standards for Criminal Justice Agencies. Race categories are: American Indian or Alaska Native; Asian or Pacific Islander; Black or African American; White; and Unknown. Ethnicity categories are: Hispanic or Latino; and Non-Hispanic or Not Latino.

Recidivist: For the purposes of this report a recidivist is defined as any inmate in the study cohort who, within one year of one's release to the community, is arraigned for an offense that ultimately results in a conviction. For this purpose, "conviction" is defined as any outcome involving a new criminal sentence, probation, suspended sentence, fine, guilty finding, or continuance without a finding (CWOF). Additional follow-up time is necessary to collect data because of the time required for an inmate's new criminal charge to reach final resolution in the trial court. For example, if an inmate who was released on January 1, 2013, was arraigned for a new offense on March 1, 2013, and subsequently convicted and sentenced in February 2015, that inmate would be treated as having recidivated within the one-year period.

Recidivism Rate: The recidivism rate is calculated by dividing the number of inmates reconvicted within one year of release by the number of inmates in the release cohort.

Recidivism Risk Score: On intake to the prison system, each inmate is given assessments to establish his/her 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 simplifying this scale to Low, Moderate, and High recidivism risk inmates. Inmates scoring a moderate to high risk to recidivate in either the general or the violent recidivism scale are administered a needs assessment and the inmate is referred to programming. Due to the implementation of the COMPAS Assessment, inmates 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 from which the inmate was released. For facilities with multi-level designations, the security level of the housing unit the inmate was released from within the facility was used.

Substance Abuse Scale: The COMPAS 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.

TCUDS: The Texas Christian University Drug Screen II or V (TCUDS) is utilized as a secondary measurement to determine substance use treatment need. The TCUDS is administered to inmates admitted to the reception centers and measures one's recent schedule of use, withdrawal, and tolerance factors providing a low or high score (TCUDS-II), or a None, Mild Disorder, Moderate Disorder, Severe Disorder score (TCUDS-V).

Time Served: Time served includes the inmate's length of stay in Massachusetts Department of Correction custody as well as jail credits received prior to sentencing.

Violent Offense: Any offense that falls under crimes against the person, pursuant to M.G.L. c. 265, or a sex offense.

Executive Summary

The purpose of this study is to analyze the recidivism rates[1] of Massachusetts Department of Correction (MA DOC) criminally sentenced inmates released to the community via expiration of sentence or parole from January 1, 2013 – December 31, 2019 who completed programs to address their criminogenic need[2] areas to determine if expected reductions in recidivism were observed.

The two criminogenic need areas examined for the cohort were substance use and academic education. Program completion for inmates with a substance use need was determined through completion of the Correctional Recovery Academy (CRA) while educational need was determined through the attainment of a High School Equivalency Credential (HSE). Three distinct cohorts were analyzed, and their associated recidivism rates were examined to determine the differences between inmates who successfully completed programming and those who did not. The first cohort consisted of inmates with both substance use and academic education need areas. The second cohort consisted of inmates with only a substance use need, and the third cohort consisted of inmates with only an educational need.

Key Findings

- Inmates with both a substance use need and an educational need had statistically significant lower recidivism rates if both program needs were met. The recidivism rate was 8.2% for inmates with both a substance use and educational need who completed CRA and achieved a HSE, compared to a rate of 20.9% for inmates who did not meet both need areas.

- Overall, inmates with both substance use and educational needs had the highest recidivism rate (18.0%), followed by inmates with only a substance use need (15.8%), and inmates with only an educational need (14.9%). Inmates with neither a substance use need, nor an educational need had the lowest recidivism rate (11.9%). (*See* graph 3).

- Inmates with only a substance use need who completed CRA had a recidivism rate of 11.4%. Inmates with only a substance use need who did not complete CRA had a recidivism rate of 19.7%.

- Inmates who only had an educational need and who also received a HSE had a recidivism rate of 9.3%. Inmates with only an educational need who did not receive a HSE had a recidivism rate of 16.7%.

- The lower recidivism rates among those inmates who met their criminogenic need areas with programming were consistent under different controlled situations (*See* Appendices A, B, and C). The consistent results across these control groups suggest a robust relationship

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[1] The recidivism rate is based on reconviction within one year for criminally sentenced inmates released to the community via expiration of sentence or parole from January 1, 2013 – December 31, 2019, whose first release occurred during this time-period. The reconviction date is based on the initial arraignment date associated with the reconviction. The recidivism rate is calculated by dividing the number of inmates reconvicted by the number of inmates in the release cohort.

[2] Factors that impact criminal behavior that can be altered over time with appropriate treatment.

between completion of programming such as CRA and/or HSE and lower rates of recidivism. These programs appeared to work particularly well with inmates of higher risk, medium security level, person and property crimes, and in the White and Black or African American racial groups.

- For the overall study cohort of inmates with a substance use and/or educational need, the one-year recidivism rate was 16.6%.

Meta-analysis has indicated that programming designed to meet the educational and therapeutic needs of inmates with histories of substance use will result in a reduction in the rate of recidivism (Washington State Institute for Public Policy, 2013). The data analyzed in this study comports with prior research that indicates therapeutic communities for substance use programming and educational programming during incarceration, independent of each other, will result in lower recidivism rates (Washington State Institute for Public Policy, 2013). More importantly, MA DOC's findings indicate the key to maximizing recidivism reduction for inmates with a substance use and educational need was to meet both need areas.

Introduction

How recidivism is conceptualized and how a recidivism cohort is defined can drastically influence a reported recidivism rate. Common definitions for recidivism include: the recommitting of a crime; the reconviction of a crime; or the reincarceration to jail or prison after release to the community following an incarceration.

For the purposes of this report, recidivism is defined as a reconviction based on an arraignment occurring within one year from the date of an inmate's release to the community. Conviction types include a criminal sentence to a Massachusetts state or county facility, a term of probation, a suspended sentence, a split sentence, a fine, a guilty finding, or a continuance without a finding (CWOF)[3]. Because of the time it takes to prosecute a crime and reach final resolution of a charge, the initial arraignment date associated with the new offense is used to determine the date of reconviction.

A primary objective of MA DOC is to rehabilitate inmates and prepare them for successful reentry into society. Inmates are assessed through a risk/needs analysis and those identified as being at the highest risk of recidivism are enrolled in programs designed to target their specific criminogenic need areas, with the goal of deterring future criminality. To measure success, recidivism rates are used to determine an inmate's ability to abstain from criminal behavior after release from prison.

Over the last decade, MA DOC has placed greater emphasis on evidence-based programming as a tool for reducing recidivism and enhancing public safety. Utilizing the best available research, MA DOC has sought to address the root causes of criminal behavior through highly focused and targeted programming. The individual progress of each inmate is further measured through the review of the inmate's personalized program plan at each annual classification review.

The cornerstone of the program services administered by MA DOC is the Risk-Need-Responsivity (RNR) framework. The RNR is predicated on three core principles:

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[3] Starting with the 2017 release cohort, CWOF's are no longer counted as a conviction for recidivism purposes.

- ***The Risk Principle*** asserts that criminal behavior can be reliably predicted. Intensity of services should match the inmate's risk level and treatment should focus on the higher risk inmates;
- ***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 inmate's personality and learning style with appropriate program settings and approaches (Andrews & Dowden, 2005; Andrews & Dowden, 2006; Andrews, Zinger, Hoge, Bonta, Gendreau & Cullen, 1990).

The RNR framework focuses correctional treatment on addressing *criminogenic needs*, factors that impact criminal behavior which can be altered over time with appropriate treatment. For example, an inmate may have a lengthy criminal record from crimes committed while under the influence of illicit drugs. MA DOC focuses on addressing criminal thinking and substance use as they can be changed with appropriately targeted services. Disregarding inmates' major needs has been shown through extensive research to increase their chances of recidivating (Andrews & Bonta, 2006). Other criminogenic needs include employment and pro-social networks/associations, education, and stable housing and home life (Andrews & Bonta, 2006).

It is important to note that one focus of this analysis included a cohort of inmates who may have participated in a version of CRA which was much different than the program in place today. CRA has evolved over time, and 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 MA DOC's data-driven approach to evidence-based decision making.

Methodology

The goal of this analysis is to explore MA DOC recidivism rates with reference to CRA and its associated qualification assessments: general risk, violent risk, and substance use risk; and high school diploma/equivalency attainment based on high school education level upon admission to MA DOC.

CRA is an intensive six-month skill-based residential substance use program. There are a total of 408 residential beds located across four separate MA DOC institutions with an additional 58 graduate support beds. CRA targets substance use, anger management, criminal thinking, and relapse prevention by utilizing a therapeutic community-based approach with an advanced cognitive behavioral curriculum that promotes positive social learning.

To identify inmates appropriate for CRA referral, the COMPAS Risk Assessment was used. Upon admission, inmates are administered the COMPAS Risk Assessment. 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 this 10-point scale, each inmate is then placed into one of three recidivism risk categories, Low (score 1-4), Moderate (score 5-7), and High (score 8-10). Inmates who score moderate to high risk are also given the COMPAS Needs Assessment to assess programming need. Inmates with a moderate to high substance use score in the substance abuse scale of the COMPAS Needs Assessment[4] or in the TCUDS[5] are referred to CRA.

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[4] Of the 8,405 moderate to high-risk inmates, 195 were not administered a needs assessment and were excluded from the study. This resulted in a recidivism cohort of 8,210.

To identify an inmate's educational need, data regarding the inmate's level of education was gathered upon the inmate's admission to MA DOC. Inmates without a high school diploma or equivalency were identified as having an educational need for the purpose of this study. Analysis was then completed to determine if receiving an HSE, while incarcerated, was associated with a reduced risk of recidivism. MA DOC offers a full continuum of educational programming and services, including basic and advanced courses in adult education, as well as English as a Second Language for non-English speaking inmates. The continuum also includes supplemental programming such as special education and Title I[6], as well as transitional college courses.

One-year reconviction rates were examined for a cohort of inmates released to the community via parole or expiration of sentence. Cohort selection included male inmates released between 2013 and 2019 whose first release occurred during the time period. Overall, there were 10,782 male inmates released to the community between 2013 and 2019.[7] This report focuses on male releases as availability of risk score data was limited for the female population. Of 10,782 male releases, 8,210 (76%) were identified as moderate to high risk to recidivate.

Of the 8,210 moderate/high risk inmates, 6,593 (80.3%) were identified for the CRA cohort, scoring moderate to high in the substance abuse scale. In addition, 3,923 (47.8%) of the 8,210 moderate/high risk inmates were identified as having an educational need as they had not attained an HSE or diploma upon their admission to MA DOC. The combined 6,593 inmates in the CRA cohort and 3,923 inmates in the educational need cohort resulted in an overall study cohort of 7,486 as 3,030 inmates were in both the CRA and educational need cohorts.
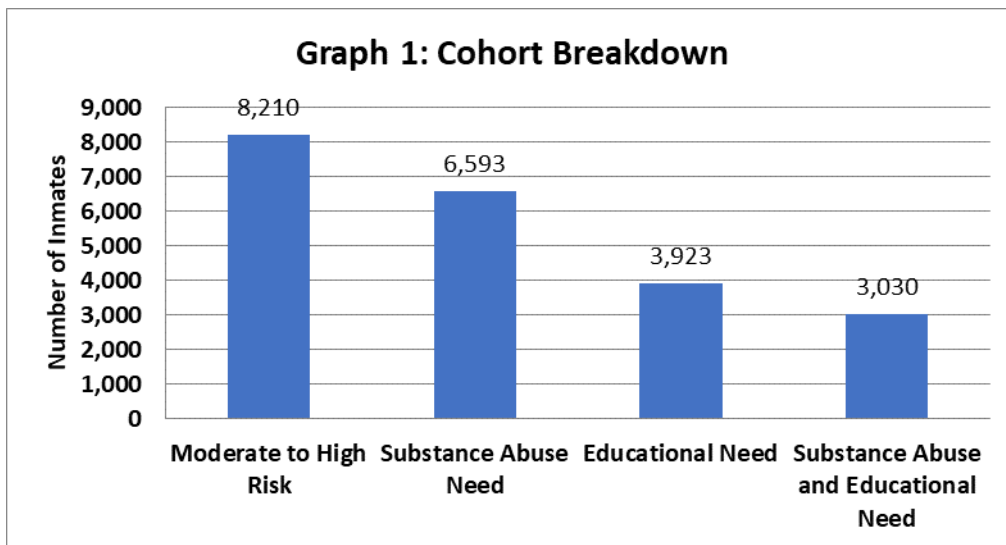

Of the 7,486 inmates with a substance use or educational need, 3,030 (40.5%) had a need in both areas, 3,563 (47.6%) had only a substance use need and 893 (11.9%) had only an educational need. This report will examine the recidivism rates for each of these three cohorts to compare and describe differences between those inmates who successfully completed CRA and/or attained an HSE, and those inmates who did not participate in programming to address their criminogenic needs.[8] It is important to note that this report only examines substance use and educational needs; there are other inmate need areas and programs that are not included in this report.
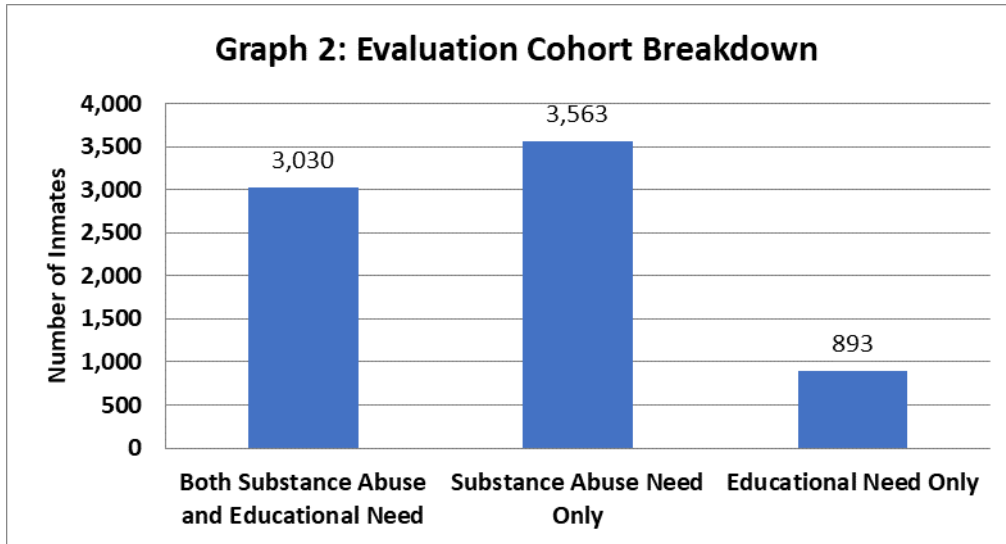
CRA data and HSE data was gathered from MA DOC's Inmate Management System (IMS) and merged into the cohort data file of calendar years 2013 - 2019 male releases to the community. CRA data was sorted to identify inmates in the study cohort who completed CRA, which is indicated by a termination reason of 'Completed Successfully' for identified CRA types and flagged with their most recent completion date. Data regarding the educational levels of inmates was also gathered from IMS to identify inmates who received their HSE by passing either the General Equivalency Diploma (GED) or High School Equivalency Test (HiSET) while incarcerated.

For this report, the follow-up timeframe for a recidivist was based on the initial arraignment date for the new charge which resulted in a new criminal sentence, probation term, suspended sentence, guilty finding, fine, or CWOF[9]. Although there was a one-year timeframe for recidivism, additional time is necessary when collecting reconviction data to allow for an inmate's new charge to reach final resolution in the trial court.

Section I: Two-Need Area Cohort

**Correctional Recovery Academy and High School Equivalency Credential**

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[8] Please note that inmate participation in the CRA or the GED program is voluntary, which can lead to data bias and may impact the findings from this study.
[9] Starting with the 2017 release cohort, CWOF's are no longer counted as a conviction for recidivism purposes.

Of the 8,210 male releases with a moderate to high risk to recidivate, 6,593 were assessed to have a moderate to high substance use score and had been referred to CRA and 3,923 were identified to have an educational need as they had not attained an HSE or diploma before admission to the MA DOC. Of the inmates with a substance use or educational need, 3,030 had a need in both areas, 3,563 only had a substance use need, and 893 only had an educational need.

In graph 3, the recidivism rate for inmates identified as having both a substance use and educational need (n = 3,030) was 18.0%, compared to a rate of 11.9% for inmates with no need in these two areas. The recidivism rate for inmates with a need in only one of the two need areas was approximately 15.5%.
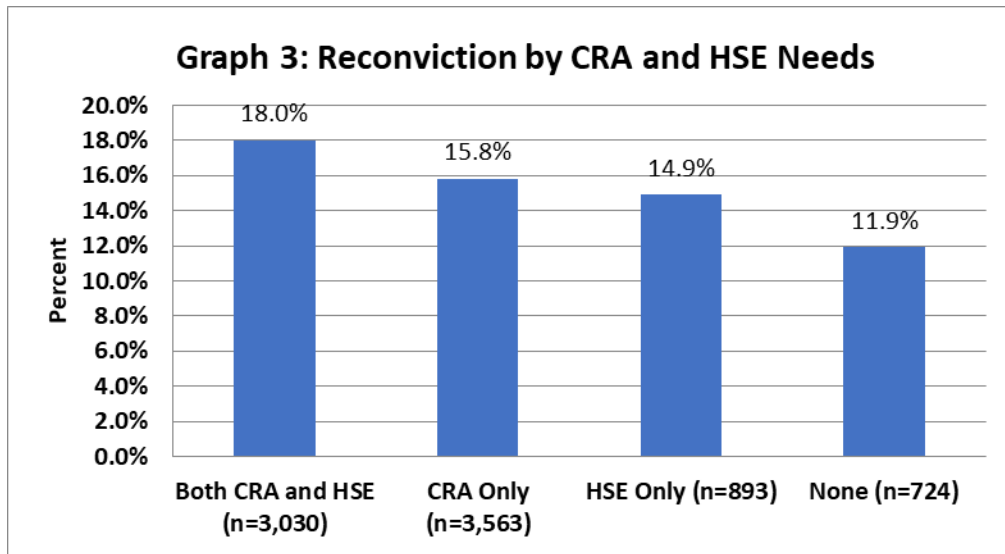
The following analysis (graph 4) examines recidivism rates of the 3,030 inmates who had both a substance use and an educational need. Recidivism rates for inmates with two program need areas who met both those needs are examined along with the recidivism rates of inmates who did not.

The recidivism rate was only 8.2% when inmates with both a substance use and an educational need completed CRA and attained their HSE. The recidivism rate significantly increased to 20.9% when no need area(s) were met. If only one of the need areas was met, meeting the need of CRA is more effective in reducing recidivism than meeting the educational need. It is statistically significant both in total, and in the subgroups of high total risk score; medium or combined medium and maximum release security level; inmates either supervised or non-supervised post-release; time served of 3 or more years; person and violent crimes; White, Black or African American, and Hispanic inmates; and inmates in both the younger than 35 and 35 or older age cohorts. (*See* Appendix A). This finding highlights the importance of addressing multiple need areas.

Graph 4: Reconviction by CRA and HSE Needs Met Among Inmates with Both Needs
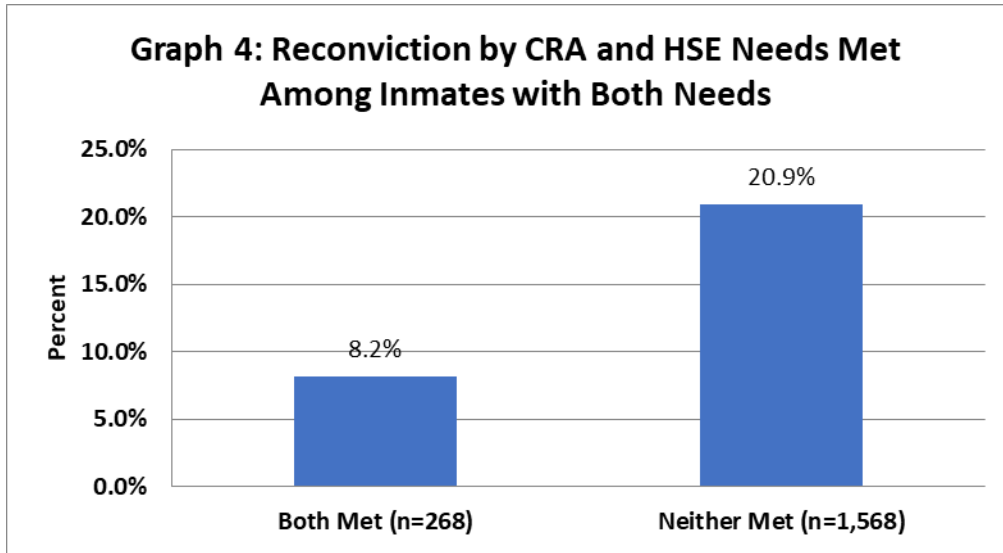
The relationship between meeting multiple need areas and lower recidivism rates appeared to be consistent under different controlled situations (*See* Appendix A), which suggests that the relationship is valid and not influenced by other factors.

Section 2: One Need Area Cohort

Correctional Recovery Academy

There were 3,563 inmates who had a substance use need but not an educational need in the study cohort. The recidivism rate for the inmates who met their substance use need by completing CRA was 11.4% compared to a rate of 19.7% for those who did not complete CRA. These findings are consistent with prior research indicating a reduction in recidivism rates with the use of effective evidence-based programming (Sherman et al., 2002, and Washington State Institute for Public Policy).

Graph 5: Reconviction by CRA Need Met Among Inmates with CRA Need Only
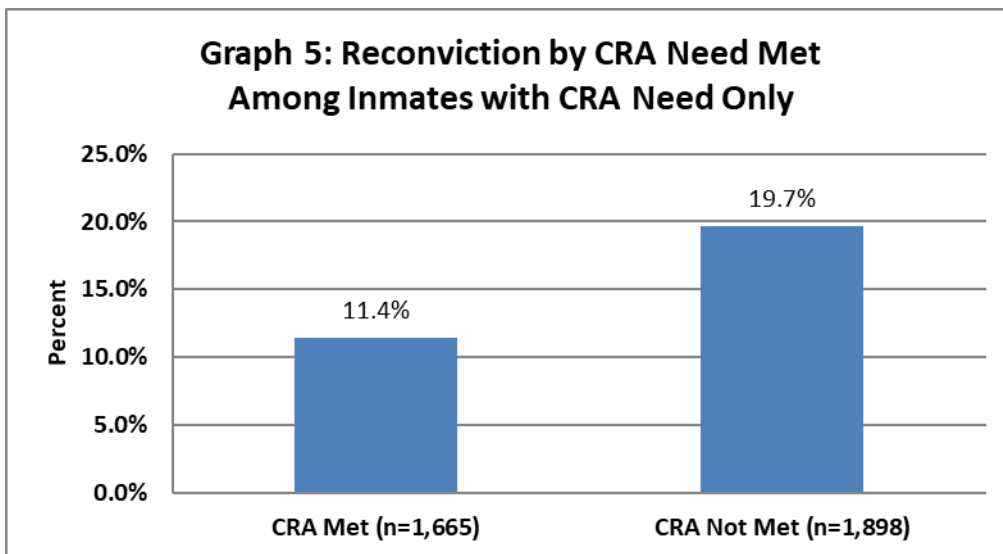
The data shows the association between the successful completion of CRA and the lower rate of recidivism in 22 of the 26 segments of inmates we tested, with the exceptions of inmates with a medium total risk score; with ELMO/Pre-release or maximum release security level; who committed a sex crime; and inmates who identified themselves with the racial identifier of American Indian or Alaska Native, Asian or Pacific Islander, and Unknown (*See* Appendix B).

Section 3: One Need Area Cohort

High School Equivalency Credential

There were 893 inmates in the study cohort that had an educational need, but no substance use need. Of these 893 inmates, those who received an HSE while incarcerated had a recidivism rate of 9.3% compared to a rate of 16.7% for those who did not receive their HSE. These findings are consistent with prior research indicating a reduction in recidivism rates with the use of effective evidence-based programming (Sherman et al., 2002, and Washington State Institute for Public Policy).

Graph 6: Reconviction by HSE Need Met Among Inmates with HSE Need Only
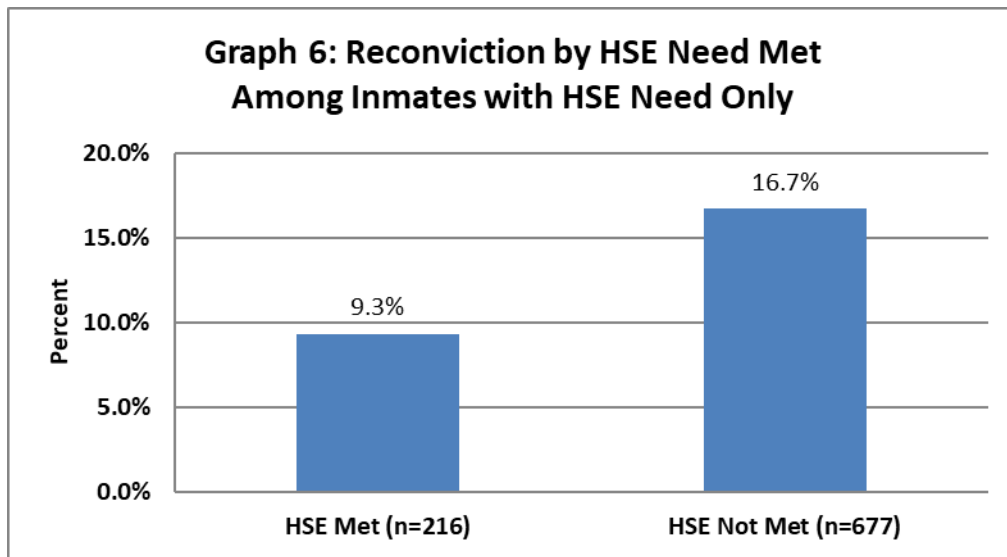
See Appendix C for a comparison of recidivism rates for inmates with a HSE need only by control variables. It shows a statistically significant association between a lower rate of recidivism and receiving a HSE both in total, and in the subgroups of high total risk score; medium or combined medium and maximum release security level; inmates supervised post-release; property and violent crimes; White and Black or African American inmates; and inmates in both the younger than 35 and 35 or older age cohorts.

Conclusion

The findings discussed in this report indicate that the key to maximizing recidivism reduction for inmates with both a substance use and an educational need is to address both need areas. A typical study isolates one program with the goal of measuring the treatment effect and its corresponding impact on recidivism. However, a large number of MA DOC new commitments have been assessed as having more than one need, thus requiring multiple programs to effectively mitigate their risk of reoffending. The goal of this study was to go beyond the traditional approach of identifying the treatment effect of an individual program by exploring the combination of both substance use and educational programming.

The results from this study are promising and consistent with the meta-analyses of similar evidence-based programs, along with previously published statistical analyses of CRA by MA DOC. More importantly, this statistical analysis revealed that inmates with both substance use and educational needs had statistically significant lower recidivism rates if both program needs were met. The recidivism rate was 8.2% for inmates with both a substance use and an educational need, completed CRA, and achieved an HSE. This recidivism rate is compared to a rate of 20.9% for inmates who did not meet both need areas. The analysis also found that meeting only the CRA need was also associated with lower rate of recidivism. However, meeting the educational need alone had no such effect. (*See* Appendix A). Future studies will explore the impact of meeting other criminogenic needs areas.

Based on the findings presented herein, there is evidence to support discussion of a modified CRA that would also have an educational component to address the needs of those inmates who have both a substance use and an educational need. Introducing such a track that would combine both need areas would allow inmates to address both critical needs in an efficient manner, with the added benefit of potentially allowing the programs to further complement each other.

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Appendix A

Control Variable	Category	Both Met		CRA Met		EDUC Met		None Met		TOTAL	
		PCT	N	PCT	N	PCT	N	PCT	N	PCT	N
Total	Reconviction**	8.2%	268	14.9%	901	20.5%	293	20.9%	1,568	18.0%	3,030
Recidivism Risk Score	High**	8.3%	217	17.7%	705	23.5%	234	23.2%	1,284	20.3%	2,440
	Medium	7.8%	51	4.6%	196	8.5%	59	10.6%	284	8.1%	590
Release Institution Security Level	ELMO/Pre-release	5.1%	59	9.5%	222	12.2%	41	10.3%	126	9.4%	448
	Minimum	11.6%	69	13.1%	259	9.3%	43	11.2%	205	12.0%	576
	Medium*	7.8%	129	18.5%	395	21.5%	149	20.5%	898	19.0%	1,571
	Maximum	9.1%	11	24.0%	25	31.7%	60	31.9%	339	30.8%	435
Security Level	Minimum security	8.6%	128	11.4%	481	10.7%	84	10.9%	331	10.8%	1,024
	Higher security**	7.9%	140	18.8%	420	24.4%	209	23.6%	1,237	21.6%	2,006
Post Release Supervision	Non-supervised*	8.7%	69	18.4%	326	25.6%	86	22.1%	684	20.5%	1,165
	Supervised**	8.0%	199	12.9%	575	18.4%	207	20.0%	884	16.4%	1,865
Time Served	Less than 3 yrs	16.2%	37	17.1%	351	23.5%	98	19.1%	802	18.8%	1,288
	3 to less than 6 yrs**	7.4%	122	14.4%	424	22.3%	139	21.9%	580	18.0%	1,265
	6 or more yrs**	6.4%	109	10.3%	126	10.7%	56	25.8%	186	15.5%	477
Governing Offense Type	Drug	4.7%	64	11.4%	299	12.9%	62	12.8%	360	11.6%	785
	Person**	7.2%	138	15.0%	327	22.9%	144	23.3%	700	19.5%	1,309
	Property	11.8%	17	20.5%	117	31.0%	29	31.7%	218	27.3%	381
	Sex	0.0%	8	10.0%	20	15.0%	20	18.2%	88	15.4%	136
	Other Crimes	17.1%	41	18.1%	138	18.4%	38	16.8%	202	17.4%	419
Governing Offense	Non-Violent	9.8%	122	15.0%	554	18.6%	129	19.1%	780	16.9%	1,585
	Violent**	6.8%	146	14.7%	347	22.0%	164	22.7%	788	19.1%	1,445
Race/Ethnicity[10]	White*	8.5%	94	14.2%	226	22.1%	140	22.0%	532	19.0%	992
	Black or African American*	8.8%	80	17.9%	274	19.0%	79	22.4%	410	19.3%	843
	Hispanic*	8.1%	86	13.6%	391	18.8%	69	19.1%	614	16.4%	1,160
	Other[11]	0.0%	8	0.0%	10	20.0%	5	16.7%	12	8.6%	35
Age at Release	Younger than 35**	9.0%	156	17.1%	356	23.0%	204	22.0%	823	19.7%	1,539
	35 or older**	7.1%	112	13.4%	545	14.6%	89	19.7%	745	16.2%	1,491

One Year Reconviction Rates for Inmate with both a CRA Need and a HSE Need by Control Variables

* denotes p < .05, ** denotes p <.01

[10] Race categories have changed in accordance with 501 CMR 18.00.
[11] Includes the racial categories of American Indian or Alaska Native, Asian or Pacific Islander, and Unknown.

Appendix B

Control Variable	Category	SA Need Met		SA Need Not Met		TOTAL	
One Year Reconviction Rates for Inmate with a CRA Need but no HSE Need by Control Variables							
		PCT	N	PCT	N	PCT	N
Total	**Reconviction****	11.4%	1,665	19.7%	1,898	15.8%	3,563
Recidivism Risk Score	**High****	13.2%	1,224	23.0%	1,473	18.6%	2,697
	Medium	6.1%	441	8.2%	425	7.2%	866
Release Institution Security Level	**ELMO/Pre-release**	8.5%	435	10.5%	267	9.3%	702
	Minimum*	8.8%	456	15.8%	241	11.2%	697
	Medium**	13.6%	728	19.9%	1,006	17.2%	1,734
	Maximum	28.3%	46	28.1%	384	28.1%	430
Security Level	**Minimum security***	8.6%	891	13.0%	508	10.2%	1,399
	Higher security**	14.5%	774	22.2%	1,390	19.4%	2,164
Post Release Supervision	**Non-supervised****	14.7%	475	25.4%	755	21.3%	1,230
	Supervised**	10.0%	1,190	15.9%	1,143	12.9%	2,333
Time Served	**Less than 3 yrs****	13.1%	559	21.4%	938	18.3%	1,497
	3 yrs to less than 6 yrs**	10.6%	745	18.0%	735	14.3%	1,480
	6 or more yrs*	10.2%	361	18.2%	225	13.3%	586
Governing Offense Type	**Drug***	8.9%	426	15.7%	369	12.1%	795
	Person**	11.9%	725	20.6%	874	16.6%	1,599
	Property*	16.4%	244	24.8%	343	21.3%	587
	Sex	20.9%	43	19.0%	79	19.7%	122
	Other Crimes*	7.0%	227	15.5%	233	11.3%	460
Governing Offense	**Non-Violent****	10.5%	897	18.9%	945	14.8%	1,842
	Violent**	12.4%	768	20.5%	953	16.9%	1,721
Race/Ethnicity[12]	**White****	13.0%	810	20.5%	1099	17.3%	1,909
	Black or African American**	10.2%	518	19.3%	482	14.6%	1,000
	Hispanic*	8.8%	317	17.4%	299	13.0%	616
	Other[13]	15.0%	20	22.2%	18	18.4%	38
Age at Release	**Younger than 35****	11.0%	690	22.3%	949	17.6%	1,639
	35 or older**	11.6%	975	17.1%	949	14.3%	1,924

* denotes p < .05, ** denotes p <.01

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[12] Race categories have changed in accordance with 501 CMR 18.00.

[13] Includes the racial categories of American Indian or Alaska Native, Asian or Pacific Islander, and Unknown.

Appendix C

Control Variable	Category	HSE Need Met		HSE Need Not Met		TOTAL	
One Year Reconviction Rates for Inmate with an HSE Need but no CRA Need by Control Variables							
		PCT	N	PCT	N	PCT	N
Total	Reconviction*	9.3%	216	16.7%	677	14.9%	893
Recidivism Risk Score	High	13.5%	141	19.7%	493	18.3%	634
	Medium*	1.3%	75	8.7%	184	6.6%	259
Release Institution Security Level	ELMO/Pre-release	9.8%	51	13.1%	107	12.0%	158
	Minimum	5.4%	56	7.5%	133	6.9%	189
	Medium*	8.5%	82	19.1%	330	17.0%	412
	Maximum	18.5%	27	24.3%	107	23.1%	134
Security Level	Minimum security	7.5%	107	10.0%	240	9.2%	347
	Higher security*	11.0%	109	20.4%	437	18.5%	546
Post Release Supervision	Non-supervised	14.6%	41	20.4%	260	19.6%	301
	Supervised*	8.0%	175	14.4%	417	12.5%	592
Time Served	Less than 3 yrs	8.8%	34	17.7%	265	16.7%	299
	3 to less than 6 yrs	12.5%	80	18.0%	245	16.6%	325
	6 or more yrs	6.9%	102	13.2%	167	10.8%	269
Governing Offense Type	Drug	8.3%	36	14.7%	177	13.6%	213
	Person*	7.3%	110	18.5%	254	15.1%	364
	Property	0.0%	10	25.4%	63	21.9%	73
	Sex	0.0%	8	15.2%	46	13.0%	54
	Other Crimes	17.3%	52	12.4%	137	13.8%	189
Governing Offense	Non-violent	12.2%	98	15.6%	377	14.9%	475
	Violent*	6.8%	118	18.0%	300	14.8%	418
Race/Ethnicity[14]	White*	7.0%	43	20.7%	116	17.0%	159
	Black or African American*	8.3%	96	18.0%	261	15.4%	357
	Hispanic	11.8%	68	14.5%	290	14.0%	358
	Other[15]	11.1%	9	0.0%	10	5.3%	19
Age at Release	Younger than 35*	12.3%	154	19.5%	369	17.4%	523
	35 or older*	1.6%	62	13.3%	308	11.4%	370

* denotes p < .05, ** denotes p <.01

[14] Race categories have changed in accordance with 501 CMR 18.00.
[15] Includes the racial categories of American Indian or Alaska Native, Asian or Pacific Islander, and Unknown.