

A Study on the Habilitation of Chronic Offenders in a Massachusetts House of Correction

Barnstable County



October 15, 2003

BOTEC Analysis
CORPORATION

24 Crescent Street, Waltham, MA 02453



Executive Summary

Introduction: The Executive Office of Public Safety, with funding from the National Institute of Justice, contracted with BOTEC Analysis Corporation to undertake a process and outcome study of the Barnstable House of Correction's Residential Substance Abuse Treatment (RSAT) program, administered by AdCare Criminal Justice Services in coordination with the Barnstable County Sheriff. The evaluations were completed in October 2003.

These studies indicated that inmates who completed the RSAT program had a smaller likelihood of rearrest in the year following release than RSAT inmates who did not complete the program. It is important to note that the failure to complete was due principally to early release from Barnstable rather than removal from the program for cause.

Steve Valle, Ph.D. President and CEO of AdCare Criminal Justice Services requested that the study be extended to examine the rearrest rate for an at least an additional year, and to estimate the value of the reduced recidivism. This report is the response to that request.

Summary: During the past 30 years there has been a debate among corrections officials, criminologists, psychologists and others about appropriate ways to habilitate incarcerated offenders. Currently, there is general agreement that efforts at habilitation should target offenders' risk, needs and responsivity. Specifically, *risk* measures the required level of intervention, *need* targets the dynamic factors in need of change, and *responsivity* is the delivery of services that match the learning styles of the offender. The RSAT program at Barnstable, which is based on these principles, has successfully reduced the recidivism for those who complete the program by an average of 15.5 percent

points. Furthermore, this difference is maintained for at least three years after an inmate's release. In brief, the program works.

The RSAT program provides considerable value for its cost. Not only are program finishers less likely to be rearrested but those who are arrested are charged with lesser crimes and less likely to return to jail. The "incarceration" benefit gained from the inmates who were referred to and completed the RSAT program between January 1999 and June 2001 is approximately \$490,000 in reduced time re-sentenced to jail.

In addition, there are benefits to persons, who without the RSAT program would be crime victims. Specifically, if the RSAT finishers had not participated in the program the victim costs of crime, both personal and property damage, as well as reductions in their quality of life, would have been \$285,525. The approximate total benefits of the RSAT program of avoided victim costs (\$285,525) and avoided incarceration (\$490,000) are \$775,525.

It is important to understand that the estimated benefit measurements are at best good approximations, but it reasonable to conclude that the RSAT program based on behavioral cognitive principles and implemented with integrity and strong support of the corrections system has public safety benefits that exceed the program costs.

Douglas Wilson, Ph.D.
Andrew R. Klein, Ph.D.

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BOTEC Analysis Corporation
Waltham, Massachusetts

A Study on the Habilitation of Chronic Offenders in a Massachusetts House of Corrections

Introduction: The following report extends a study that was undertaken for the U.S. Department of Justice's National Institute of Justice and the Executive Office of Public Safety, Commonwealth of Massachusetts, regarding the ability of the residential substance abuse treatment (RSAT) program at the Barnstable House of Corrections to reduce recidivism among substance abusing offenders. The study concluded that offenders who completed the RSAT program were less likely to be arrested for new crimes in the year following their release.

The core of the extended work is to examine the rate of recidivism of RSAT participants in the two years following their release from Barnstable, the degree to which the outcome of the Barnstable program is representative of jail-based habilitative programs, and the dollar benefits, net of costs, that accrue to the House of Corrections.

Residential substance abuse treatment (RSAT) programs operate in jails and prisons in many parts of the country. Currently they operate in all 13 Massachusetts Houses of Corrections, as well as in other correctional facilities in the State. The Commonwealth supports these programs with state, county and federal funds. Federal funding requires that the facility follow particular guideline. Specifically, the inmates must be separately housed and incarcerated 6 to 12 months, long enough to permit effective substance abuse treatment. The objective of an RSAT program is to reduce the likelihood of recidivism of inmates by treating their substance abusing and other criminal behaviors through the development of their cognitive, affective, social and vocational skills.

The challenge facing any jail-based or prison-based habilitation program to treat an inmates' substance abusing behavior and their other criminal behaviors is by all measures a significant one. Typically, RSAT inmates have extensive records of substance abuse and other criminal behaviors. The majority of RSAT participants at the Barnstable House of Correction can be described as "career" criminals.

There is considerable controversy as to whether programs such as RSAT can produce significant positive results that enhance public safety and produce net dollar benefits.ⁱ Specifically, there is not universal agreement that such programs are a good investment.

This discussion provides evidence that a sound offender treatment program does produce positive outcomes. The fundamental question that this study examines is: "Can a correctional program for chronic criminal offenders deter inmates from committing additional crimes, even though they have a history of serious disruption due to substance abuse and other behaviors?"

A Brief Review of What Others Think - An Historical Perspective: It is a nagging fact that all jail inmates and nearly all prison inmates will return to the community. Because of this the effectiveness of treatment in controlling recidivism and criminality is an important concern. In 1974 Robert Martinson published a critical article in *Public Interest*, a journal widely read at the time by policy makers, which concluded that a rigorous review of corrections habilitation programs showed that they were ineffective. Nothing worked! Published in a period of social upheaval the article resonated among both liberal and conservatives, although for different reasons.

Martinson, later funded to update his evaluation, published in 1979 an article in the little read *Hofstra Law Review* in which he retreated. "I have often said that treatment added to the networks of criminal justice is 'impotent'... the conclusion is not correct." He concluded that "treatments will be found to be 'impotent' under certain conditions, beneficial under others, and detrimental under still others."ⁱⁱThe *Hofstra* article, which

went largely unnoticed, was soon followed by other research that ratified Martinson's second thoughts. Some programs do work!

By the late 1980's the writings about criminal habilitation programs had reached three major conclusions. To work habilitative correctional programs must be based on sound criminological theory, and have therapeutic integrity; that is, they must be implemented as designed. Finally, the effectiveness of treatment programs will vary substantially to the extent that individual differences are measured and taken into account. When a program is based on sound theory, well implemented, and responds to individual differences recidivism can be reduced.

Effective treatment interventions it was concluded should follow a short list of guidelines. First, the intervention should target to change the known predictors of crime and recidivism. Many of the most important predictors are dynamic. The importance of dynamic characteristics is that they can be altered with appropriate interventions. Dynamic factors include anti-social/ procriminal attitudes, values and belief, and procriminal associates all of which provide support for crime, and dysfunctional affects such as impulsiveness, risk-taking and low self-control. On the other hand, factors such as low self-esteem are not strongly related to criminality, and are not critical treatment targets. .

The treatment services should be behavioral in nature and should match the affective and cognitive characteristics of the offenders. As such the intervention should employ cognitive-behavioral and social learning techniques of modeling and reinforcement. The advantage of cognitive approaches is that they help the offenders to define the problems that led them into conflicts with authorities, to select goals, generate alternatives that are prosocial and implement these solutions.

In summary, Valle and Humphrey write that successful treatment programs target three criminogenic principles: risk, need and responsivity.ⁱⁱⁱ *Risk* measures the required

level of intervention, *need* targets the dynamic factors in need of change, and *responsivity* is the delivery of services that match the learning styles of the offender.^{iv}

Cullen and Gendreau^v write that there is consensus on what types of intervention achieve the lowest and highest effects. Effective habilitation programs are based on social learning principles that seek to enhance the offender's cognitive and affective skills by using more than one treatment modality to target the multiple problems offenders experience. Deterrence-based interventions, in contrast, tend to be particularly ineffective in diminishing criminal involvement. Clearly punishment approaches do not target the anti-social criminal behaviors of offenders and thus are among the most ineffective interventions. Less structured approaches such as casework or individual and group counseling by themselves are repeatedly less successful.

Interestingly the effect of treatment programs is not moderated by the risk level of the offender. High-risk offenders can be reached by correctional treatment. Treatment interventions should include these offenders targeting for change their criminal behaviors. The most substantial changes in recidivism can result from providing these high risk offenders with treatment services.

In terms of the delivery process, the treatment staff must work hard, be competent, respond to offenders' individual differences, target their criminal antisocial attitudes and behaviors, and employ the principles and techniques of the therapy they purport to provide. In addition the services should be lengthy and intensive lasting 3-9 months and occupying 40-70 percent of the offender's time while they are in the program. The program must also surmount the difficulties presented by a correctional environment.

Jail-based interventions should be followed-up in the community to prevent relapse and support offenders' practice of prosocial skills. These interventions also should be responsive to the learning styles and needs of the offender, use staff that is monitored, well trained, and knows how to deliver the treatment.

How Much Difference Does an Appropriate Intervention Make? Andrews et al^{vi} systematically tested whether interventions that reflected the core principles hypothesized to be needed in an effective intervention made a difference. Effective programs deliver services to high-risk offenders, target pro-criminal behaviours for change, and use treatments that matched the client's needs and learning styles. In a meta-analysis^{vii} of 80 program evaluation studies, in which the program followed an appropriate program structure and incorporated principles of effective intervention, there was as much as a 30 percent point reduction in recidivism. In contrast programs that did not follow the principles listed above, the recidivism rate was 7 percent points *higher* than for the control group.

Antonowicz and Ross^{viii} concluded in their meta-analysis that successful habilitation programs were more likely to have a sound conceptual model, multifaceted programming, targeted the pro-criminal behaviors, were responsive to the cognitive and social deficiencies of the offender and engaged in role playing, modeling and social cognitive skills training.

A meta-analysis by Andrews^{ix} extended the work by Antonowicz and Ross with the same result. When no principles of effective treatment were addressed the programs increased recidivism, when the treatment intervention conformed to the principles of effective treatment the recidivism declined by as much as 26 percent points. Programs that combine appropriate features are capable of achieving meaningful results.

Analysis consistently shows that deterrence-oriented interventions are ineffective. These programs *increase* recidivism 3-12 percentage points^x. Relying on punishment to achieve "correctional treatment" is unlikely to work and is thus a poor investment choice. Investment in appropriate correctional habilitation is in contrast a good choice.

A Massachusetts Example: The RSAT program at the Barnstable House of Corrections provides an example of a successful implementation of an offender habilitation program. The Barnstable RSAT program participants are separately housed

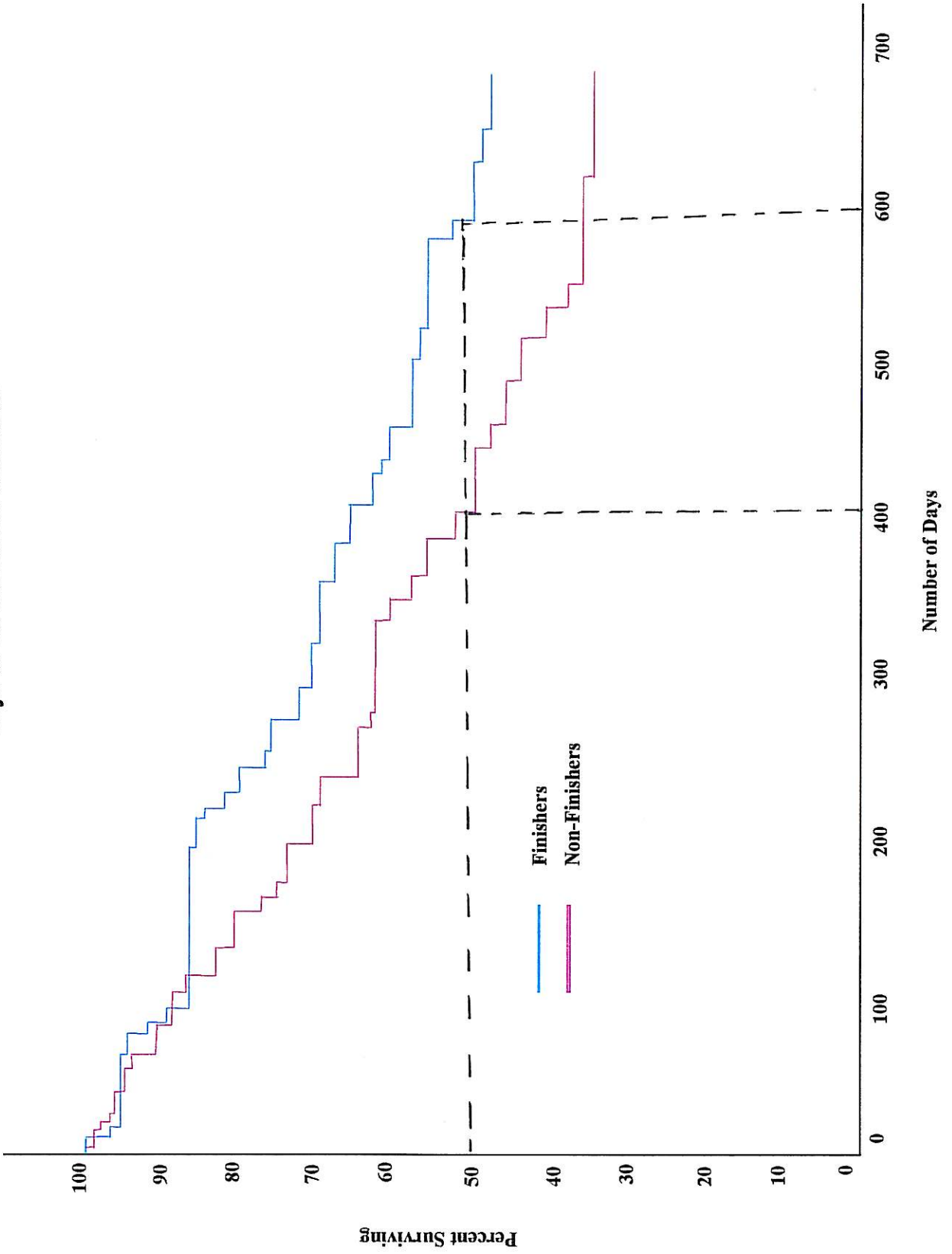
on the Barnstable County campus. Under the current guidelines the offenders have to be sentenced to Barnstable for at least nine months, in order to have time to complete the two-part six-month RSAT program.

AdCare Criminal Justice Service (ACJS) was hired by the Barnstable County Sheriff's Office to provide management of its human services in 1998. In addition to training and technical assistance, AdCare immediately began revamping the approach to treatment based upon the principles of effective treatment described in the literature. The ACJS model has three critical components;

AdCare's Integrative Therapeutic Model includes an evidence-based risk and needs assessment process that guides responsive cognitive-behavioral strategies, 12 Step principles of recovery, and bio-psycho social perspective on addiction. This integrative approach is delivered in a context of a correctional program management model that places a priority on collaborative relationships among security, administrative and treatment personnel, regular clinical supervision for staff, cross-training, and a commitment to on-going continuing education and staff development. The curriculum of the program focuses on strengthening an offender's cognitive, behavioral, pro-social and vocational skills.

It should be noted that the Barnstable RSAT program is fairly unique in that it provides effective treatment for the participants. In a review of 23 RSAT program listed in an online Abstracts Database, which focused on the evaluation of program implementation issues, description of services, RSAT staff, service delivery problems, and descriptions of participants, none provided evidence of success. The principal and troubling outcome of these studies is the difficulty that many RSAT programs experience in implementing the program, processing significant numbers of participants and providing quality services. Delivering services effectively is not an easy task and requires skilled service providers and effective cooperation with the correction facility administrators.

Days to Re-Arrest All Offenders





Between January 1999 and June 2001 472 inmates were sentenced to Barnstable House of Corrections with sentences of at least nine months. One hundred eighty-eight of these inmates were referred to RSAT. The referral criteria of the classification staff rested on the defendant's record, presenting offenses, sentence length, and other factors. Of these 188 participants 43 percent completed the program, 39 percent were released early from Barnstable and did not complete the program and 18 percent were terminated from the program for cause. The completion rate is importantly in the hands of the Barnstable administrators. Specifically, Barnstable administrators control decisions about permission to participate in RSAT, early release, and termination.

The outside program evaluation examined both the habilitation process and the outcome of the RSAT process.^{xi} These reports provide a detailed discussion of the methodologies. A central question of the study was whether the recidivism rate of participants who completed the program was lower than that of participants who failed to complete.^{xii} The outcome study provided an estimate of the difference in recidivism one-year after release. This extension of the outcome study provides an additional year of arrest data and provides an analysis of the recidivism rate over the two and three years which compares the RSAT completers and non-completers.

The previous chart summarizes the results. The chart maps the percent of RSAT offenders who finished the program and remained arrest-free each day from release to 700 days post-release. The "finishers" are compared to the "non-finishers," those who were released early or were terminated from the program for cause. After the first 100 days post-release the finishers did considerably better^{xiii} Table 1 compares the difference in the percent of RSAT participants remaining arrest-free after selected days post-release. Table 1, based on Figure 1, shows that the differences after 100 days range from 14.9 to 18.2 percent points. This is similar to the levels of improvement that were cited earlier in this paper in discussions of successful programs.

An examination of the RSAT follow-up data provides observations about areas in which offender's fail to absorb and practice pro-social behaviors. A common reason for an offender's arrest is poor driving habits. Careful driving is certainly a pro-social activity. Offenders are often stopped for a vehicular offense and are found to be driving

Table 1: Survival Differences

Days after release	Percent of RSAT participants remaining arrest-free who:		Difference in percent remaining arrest-free
	Completed the program	Did not complete the program	
1	100.0	100	0
100	88.5	86.5	2.0
200	87.2	72.1	14.9
360 (1 year)	71.7	57.7	14.0
500	58.7	44.2	14.5
600	54.7	36.5	18.2
720 (2 years)	49.5	33.7	15.8
1080 (3 years)	40.7	24.2	16.5

after license revocation. The car may be searched and found to have illegal contraband such as drugs or open alcohol containers. The result is arrest on multiple charges.

A significant number of offenders have restraining order issued against them. After release they return to familiar places which many times leads to a breakdown in their pro-social skills that results in domestic abuse or violation of the restraining order.

Finally, it is interesting to note in Table 1 that that in the first three months the RSAT completers and non-completers are indistinguishable; the RSAT lessons have had little effect, but as time passes the completers perform better than the non-completers. Even after three years the RSAT completers maintain their difference in recidivism. They do not seem to lose their new pro-social skills over time.

As will be discussed below RSAT completers are arrested less often, and their crimes are less serious as measured by the lower numbers who are returned to jail. If this pattern is representative, it is reasonable to think that post-release services can play a

pivotal role in the prevention of relapse and reintegration of the offenders into the community during the first 100 days.

The Benefits of the RSAT Program to the Barnstable House of Correction:

As noted earlier the Barnstable administrators have an important influence on the outcomes of the RSAT program. It is critical to Barnstable and other Houses of Correction that the RSAT have considerable value. A principal concern of Sheriffs or other officers is deciding about resource investments for their organization. The following discussion examines the question.

Offenders who complete the RSAT program have a lower recidivism rate than those who fail to complete due to early release from jail or termination from the program due to inappropriate behavior. Those who complete RSAT not only recidivate less, but they are arrested for less serious crimes. Specifically, in terms of being sentenced again to jail, about one-fifth of the RSAT graduates were returned, while approximately two-fifths of those who failed to finish RSAT were returned to jail for new crimes.

There are 77 RSAT completers in the evaluation sample for whom there is follow-up criminal record data for at least two years. As noted RSAT completers are less likely to engage in criminal behavior and less likely to be reincarcerated. Specifically, if the 77 finishing RSAT participants had not had access to RSAT treatment the increased serious criminal behavior and the increased rate of incarceration would have added an additional 5000 days of sentenced jail time. Five thousand days is 14 years. If a jail-year costs \$35,000, then the 77 offenders who completed RSAT during the evaluation period led to gross incarceration savings at the jail of as much as \$490, 000^{xiv}

An examination of incarceration benefits net of the program costs provides some additional insights into the importance of the RSAT program. The incremental cost of providing treatment services for 80 RSAT participants per year is about \$160,000. Not all of the 80 participants during the year will complete the program. During the evaluation period the completion rate was 43 percent, or about 34 offenders per year. If the

completion rate is 67 percent,^{xv} about 54 offenders would complete each year. The cost per RSAT finisher declines as the rate of offender completion increases. The cost per completion declines from \$4,700 at 43 percent to \$3,000 at 67 percent to \$2,000 at 100 percent.

Thus, the failure to complete RSAT due to early release or dismissal for cause is costly in terms of both loss of jail-days saved and the increased cost/ RSAT completer. The corrections administration clearly should have a strong incentive to avoid early release and to encourage the treatment team to treat intensively those offenders who chronically display the inappropriate behavior that causes their dismissal from the program.

Taking into account program costs and the rate of completion, the net jail benefits are as follows. If the annual RSAT completion rate is 43 percent in an annual cohort of 80 participants (40 every six months), the incremental gross incarceration savings in sentenced jail days is \$221,500.^{xvi} The annual incremental program costs are about \$160,000. The ratio of savings in sentenced days to program costs is \$1.38. On the other hand, if the RSAT completion rate is 67 percent in a cohort of 80 participants the incremental savings in sentenced jail days is \$351,750. The ratio of savings in sentenced days to program costs is \$2.20.

The savings for a House of Correction is not the only savings that result from an effective RSAT program. There are equally significant reductions in the costs of other parts of the criminal justice system such as incarceration in prison, rather than jail, and costs of police arrests, prosecution, and the court system. In addition, the enhancement of public safety saves direct costs of damage to and loss of property and injury to persons and important costs of pain and suffering. Pain and suffering make up about 77 percent of total direct citizen costs. Damage to property and injury to persons is about 23 percent of the costs.^{xvii} Finally, the stream of earnings of offenders who are not rearrested can be expected to be larger than offenders who are arrested for new offenses. That is, even

though RSAT finishers may not earn more money per year than those who do not finish, the fact that they earn for a longer period of time is a valuable benefit.

A Summary: The fact is that every inmate in a House of Corrections is returned to the community. It is important that corrections programs are effective in providing habilitation services to inmates. Inmates who are not provided effective services are arrested at a higher rate, commit more serious crimes and are more likely to be returned to jail. Two years after release two-thirds of the former inmates who have not had effective habilitation services have been rearrested.

Effective programs are fundamentally based on cognitive-behavioral psychology, are responsive to different offender needs, and are sufficiently lengthy and intense to afford the inmate time to learn new prosocial behaviors. Effective programs are administered by well-trained, hard working psychology professionals with the cooperation and support of the corrections administration. Although the Barnstable program does not provide an example of post-release treatment it is likely the total effectiveness would be importantly enhanced with a strong, cognitively-based post-release program. Post-release programs are an important tool for relapse prevention. The approach in the community should be consistent in theory and implementation strategies with what is delivered to incarcerated offenders. Deterrence-based programs, in contrast, are ineffective and are likely to lead to an increase in recidivism, while cognitive-based programs lead to important reductions in recidivism even among inmates judged to be at high risk for reoffending. In the Barnstable program discussed here after 100 days post-release the difference in the rearrest rate for inmates who complete RSAT compared to those who did not ranged from 14 to 18 percent points. The difference did not show signs of diminishing even after three years.

The size of this reduction is valuable to Houses of Correction. For example, if the inmates who completed RSAT had not had effective habilitation services available to them they would have had been sentenced to an additional 5000 days of incarceration.

The 5000 days is equivalent to \$490,000 of additional incarceration costs. There are also additional significant savings to the criminal justice system in terms of the costs of police, prosecution, courts and prisons sentences as well as savings in direct victim costs of property damage, physical harm, and the costs of pain and suffering. It is important that Houses of Corrections administrators appreciate the importance of offenders becoming engaged in programs such as RSAT and completing the requirement. Short-term involvement or halfway efforts are simply not effective.

ⁱ For a good discussion of this controversy see Francis T. Cullen and Paul Gendreau, *Assessing Correctional Rehabilitation: Policy Practice, and Prospects*, Policies, Processes and Decisions of the Criminal Justice System, Vol. 3, 2000, p. 109-175.

ⁱⁱ Robert Martinson, *New Findings, New Views: A Note of Caution Regarding Sentencing Reform*, Hofstra Law Review, Vol.7 (Winter), 1979, p.254.

ⁱⁱⁱ Stephen K. Valle and Dennis Humphrey, *American Prisons as Alcohol and Drug Treatment Centers: A Twenty-Year Reflection, 1980 to 2000*, Alcoholism Treatment Quarterly, Vol. 29 No.3/4, 2002, p. 95.

^{iv} Valle and Humphrey, op cit. p.95

^v Cullen and Gendreau, op cit.

^{vi} Andrews, D.A, Ivan Zinger, Robert Hoge, James Bonta, Paul Gendreau and Francis Cullen, *Does Correctional Treatment Work? A Clinically Relevant and Psychologically Informed Meta-Analysis*, Criminology, Volume 28 (August) 369-404.

^{vii} Meta-analysis is a method for combining results from different analytic studies of the same research question. The results can be used cumulatively and prospectively, and can enable definitive conclusions to be reached from several inconclusive studies, provided inherent measurement problems have been addressed. Don McNeil, *Epidemiological Research methods*, New York: Wiley and Sons, 1996, p.288.

^{viii} Daniel H. Antonowicz and Robert Ross, *Essential Components of Successful Programs for Offenders*, International Journal of Offender and Comparative Criminology, Vol. 38 (2), 1994 p. 97-104.

^{ix} Andrews, DA, Craig Dowden, and Paul Gendreau, *Clinically Relevant and Psychologically Informed Approaches to Reduced Reoffending: A Meta-Analytic Study of Human Services, Risk, Need, Responsivity and Other Concerns in Justice Context*, Unpublished manuscript, Carleton University, 1999, as cited in Cullen and Gendreau, op.cit.

^x This point is interesting in that the RSAT program would have been shown to be more effective if the control group was composed of persons in the general Barnstable population.

^{xi} *Barnstable House of Corrections Residential Substance Abuse Treatment: A Process Evaluation* (June 2000), and *An Outcome Evaluation of a Residential Substance Abuse Program: Barnstable House of Corrections* (October 2002), Massachusetts Executive Office of Public Safety Programs Division and BOTEC Analysis Corporation.

^{xii} The strength of this comparison is that all of the participants were recommended by Barnstable classification providing some uniformity among those who completed and those who did not. In addition,

the early release of participants, the dominate reason participants did not finish, was exogenous to RSAT insofar as it was controlled by the Barnstable administration, not the treatment providers or the participants.

^{xiii} There is less than a 2 percent chance that the recidivism rates for the finishers and non-finishers are the same.

^{xiv} The average number of sentenced days for the RSAT completers was 84 days, while the average number of days for those who did not complete was 151 days. The difference in jail days between those who completed and those who did not for 77 offenders is somewhat more than 5000 days or 14 years.

^{xv} On the basis of the Level of Service Inventory - Revised (LSI-R), which the Barnstable RSAT program uses to enable it to respond to the individual needs of the offender, at least 67 percent of the RSAT participants should complete RSAT on the basis of the distribution of LSI-R scores of those who do complete the program and are not released early.

^{xvi} Without RSAT the jail days for recidivating offenders in the cohort of 80 is estimated as 12080 days; this is an average of 151 days per offender. If 43 percent of the 80 offender cohort complete RSAT, the jail days for recidivating offenders is estimated as 9802, 84 days per RSAT completer and 151 per non-completing offender. This is a difference of 6.3 years or \$221,500 at a jail-year cost of \$35,000.

^{xvii} Ted R. Miller, Mark Cohen, Brian Wiersema, *Victim Costs and Consequences: A New Look*, National Institute of Justice, January 1996, p. 1.



Appendix 1: An Estimate of the Victim Benefits of the Barnstable RSAT Program

Background: The earlier discussion of this report stresses the incarceration benefits of the RSAT program to the Barnstable House of Correction. There are also important benefits of reduced future victim costs. This appendix provides an estimate of those benefits.ⁱ

There are two benefits from incarceration. Offenders do not commit public crimes while they are incarcerated, but the costs of incarceration are high. Furthermore, incarceration alone is unlikely to reduce criminality much beyond the time the offender is released. An effective RSAT program, on the other hand, provides an incremental benefit of reduced post-release criminal behavior and reduced victim costs.ⁱⁱ

As the study notes RSAT participants are “career criminals,” who have been involved in crime in their juvenile and adult years. A review of the criminal histories indicates that the 188 offenders in the sample had accumulated approximately 5000 adult charges in the fourteen years, which is the average length of their criminal career prior to their sentencing to the Barnstable House of Correction in the January 1999 - June 2001 period. This is, of course an understatement because it does not include unreported or uncharged crimes.

The crimes for which the RSAT participants were charged include non-domestic assault, domestic assault, drunk driving, burglary, larceny, motor vehicle theft and sexual assault. In addition the offenders were charged with various drug violations. Drug charges are considered “victimless” crimes. The outcome of these activities many times lead to the commitment of other crimes. The crimes are “victimless” because the participants engage in this illegal activity voluntarily. Drug abuse is in fact hardly

“victimless” because the substance abuse underlies a significant amount of crime, violence, and familial abuse. In this analysis the collateral damage of illegal drug activity are included as part of the costs of charged crimes.

Measuring Victim Benefits: An incremental benefit of RSAT is the estimated difference in avoided victim crime costs in the three years following release for offenders who completed the RSAT program and for those did not complete the program. The costs include direct tangible losses and pain and suffering and lost quality of life. The victim cost estimates are based on work by Miller, Cohen and Wiersema.ⁱⁱⁱ

Miller, et al estimated the average number of victims between 1987-1990 and made careful estimates of several categories of victim costs including victims’ productivity losses, costs of medical care, mental health, police and fire services, social services, property loss and diminished quality of life for ten types of crime, ranging from crimes that resulted in fatalities, through several types of assault, drunk driving, robbery, larceny, arson and motor vehicle theft. They found that tangible costs made up approximately 23 percent of victim costs while 77 percent of the costs were due to loss of quality of life. Miller et al based their estimates of the numbers of victims and victimizations (the number of time a victim suffered a particular crime during the study period), primarily on the basis of national surveys of *victim* reports.

Offenders sentenced to a House of Correction in Massachusetts fall within limited sentencing parameters with regard to the crime and its seriousness. Cases of offenders not sentenced to a house of correction may be disposed with a probationary sentence, a prison sentence or in some other manner. The measure of RSAT benefits reflects the distribution of criminal cases sentenced to the Barnstable House of Correction. The dollar estimate of RSAT victim benefits is an average annual amount of avoided victim costs (direct and quality of life) by type of crime weighted by the mix of criminal charges lodged against the RSAT offenders. The average victim cost of a crime by an RSAT participant is estimated to be \$8350.^{iv}

The difference in the recidivism rates for offenders who completed RSAT and those who did not, discussed earlier was applied to measure victim benefits. The difference is about 15.5 percent points each year for the three years after release from Barnstable. The difference in avoided victim costs over the three years is \$3525.^v Eighty-one offenders completed RSAT, thus the program's victim benefits were approximately \$285,525. That is, if 81 offenders had not completed RSAT direct and quality of life costs to victims would have been \$285,525 greater.

Final Notes: It is the practice in the evaluation of criminal justice studies to declare a program a success if a beneficial outcome, such as a reduction in recidivism, is measurably less due to program effects. Often analysts include everyone who participates in the program and compute whether the average outcome is measurably better than the outcome for the offenders in the control group. This later measure runs the risk of burdening the outcome with operational inefficiencies. The level of operational efficiency is mixed with treatment effectiveness. The inclusive calculation can come to the erroneous conclusion that a treatment is ineffective when the better conclusion is that the treatment is effective, but the program needs to make gains in operational efficiency.

The inefficiencies may not be under the control of the treatment team, but it may nevertheless importantly reduce net program benefits. In the Barnstable program of the 188 participants during the period January 1999 to June 2001 81 completed. This is 43 percent of the participants. The remaining 57 percent did not complete because of early release or were terminated from the program for non-compliant behavior. The Level of Service Inventory – Revised (LSI-R) is a good predictor of whether a participant will complete RSAT. On the basis of the LSI-R scores about two-thirds of the participants should complete RSAT. That is, the output of the RSAT program should have been 56 percent higher; 125 participants should have completed the program.

The approximate total benefits of the RSAT program of avoided victim costs (\$285,525) and avoided incarceration (\$490,000) are \$775,525. It is an important

principle that only the costs and benefits that vary with the decision should be considered; that is, it is the incremental costs and benefits that are critical. The incremental cost of the RSAT program is essentially the Ad Care program staff. The remaining staff is corrections personnel. The annual cost of the Ad Care program is approximately \$160,000. The ratio of benefits to costs for the program is \$4.84.

It is important to understand that the benefit measurements presented here are at best good approximations, but it is reasonable to conclude that an RSAT program based on behavioral cognitive principles and implemented with integrity and the strong support of the corrections system has public safety benefits that well exceed the program costs.

ⁱ The framework for this discussion is based on Mark A. Cohen *Measuring the Costs and Benefits of Crime and Justice, Measurement and Analysis of Crime and Justice*, Vol. 4, National Institute of Justice, 2000, p. 263-315.

ⁱⁱ A third benefit is reduced use of the criminal justice system including arrest costs, prosecution costs and court costs. These costs while important are not estimated in this study beyond the costs of re-incarceration already discussed.

ⁱⁱⁱ Ted R. Miller, Mark A. Cohen and Brian Wiersema, *Victim Costs and Consequences: A New Look, Research Report*, National Institute of Justice, 1996.

^{iv} Adjusted for price changes between 1993, the basis of the Miller et al study, and 2000, the midpoint of the RSAT study.

^v Specifically, the average direct costs and quality of life costs for a victim is \$8350. The average difference in recidivism between the RSAT finishers and non-finishers is about 15.5 percent points; the victim benefit of avoided costs is \$ 1294.00 per victim, (15.5 percent x \$8350). The value today of a three year stream of benefits using a modest 5 percent discount rate is \$3525.00.