

**The author(s) shown below used Federal funds provided by the U.S. Department of Justice and prepared the following final report:**

**Document Title: Overview and Illustrative Examples of the Research Agenda for the Therapeutic Community Continuum of Treatment for Offenders in Delaware**

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**Document No.: 182359**

**Date Received: May 15, 2000**

**Award Number: 97-RT-VX-K004**

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**Overview and Illustrative Examples of the Research Agenda  
for the Therapeutic Community Continuum of Treatment  
for Offenders in Delaware**

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**Presented at Workshop Session "Update on National Institute of  
Justice's Residential Substance Abuse Treatment for State Prisoners  
Research Agenda," 35th Annual Meeting of the Academy of Criminal  
Justice Sciences, March 12, 1998, Albuquerque, NM. This work is  
being supported by NIJ Cooperative Agreement #97-RT-VX-K004**

## SUMMARY

Over the past 8 years the State of Delaware has put into place first, in-prison Therapeutic Communities (TCs), then a work release TC, and finally a TC based Aftercare program. Delaware's Therapeutic Community Continuum of residential treatment for drug abusing prisoners has become a model for the State Prisoner Program (OJP 1996), and Delaware has used its new treatment funding to expand treatment capacity and urine monitoring for drug offenders nearing prison release and for those in residential work release programs. Evidence of the success of the Delaware programs would not exist without an extensive evaluation program being conducted by James Inciardi and his colleagues at the Center for Drug and Alcohol Studies at the University of Delaware. These evaluation efforts began with support from NIJs Project Reform, continued with extensive support from NIDA and from CSAT, and now, again with NIJ support through the Residential Substance Abuse Treatment for State Prisoners' Program. The efforts being accomplished with NIJ support are not duplicating any other current evaluation efforts in Delaware, but they are using existing as well as newly collected process and outcome information. We have three specific aims in this research:

- 1) To evaluate the new program expansion of the TC Continuum programs in Delaware. We will be doing this in cooperation with NDRI's instruments for the National Evaluation of Prison Substance Abuse Treatment.
- 2) To use grant support to access official correctional and criminal justice records to improve our recidivism outcome criteria.
- 3) To make retrospective use of existing client treatment files to augment already existing outcome evaluation data.

Below, we examine some illustrative material on plans and preliminary findings for each of these specific aims. Our findings support the already established conclusion that "quantity" of treatment, that is, length of time in treatment, is predictive of better and more long-lasting treatment outcome. We are also finding preliminary support for "quality" of treatment, that is, appropriate assessment of clients' needs and a treatment focus on proximate outcomes are important to treatment success as well. More reliable outcome criteria and new information about circumstances, motivations, and appropriateness of individual client characteristics for treatment will significantly increase our ability to select clients and predict likelihood of treatment success. Such information should be useful to Criminal Justice planners, and helpful to NIJ's National Evaluation of the Residential Substance Abuse Treatment Program.

**Specific Aim 1: To evaluate the new program expansion of the TC Continuum programs in Delaware.**

Program expansion in Delaware is occurring with RSAT support but in a somewhat different form than is the model in other states. Because many of the Delaware programs were in existence or in the planning stages, RSAT funding has been used to expand treatment capacity in 5 of the 6 Residential Treatment programs that are part of the Therapeutic Community Continuum, as shown in Table 1 as of December 1997. Only the women's prison program is not currently receiving RSAT funding. Two programs are just being brought up to capacity, and all the programs will be full by the end of March, 1998.

With some difficulty, since each of the 6 programs is completing the form, we are getting program data using NDRI's Program Level Report questionnaires for the National Evaluation of Prison Substance Abuse Treatment.

One of the main issues for process evaluation is assessing client flow and changes in client flow through the continuum. As shown in Figure 1, Delaware has done a better-than-average job of increasing capacity, and, even, in making slots available at the "primary," "secondary," and "tertiary" levels of treatment. However, there are fewer slots available at each level such that there are less than half as many clients per year who can go through aftercare as compared to prison-based treatment. Even though there is a certain amount of attrition at each stage of the continuum, the decreasing number of slots available in work release and aftercare point to potential bottlenecks in the treatment continuum.

The problem of client flow can be compounded by external forces. Currently problems exist with judges making direct commitments of clients to programs without clinical assessment and without consideration for spaces being available. For example, a judge will "sentence" a defendant to CREST, sometimes when the person does not have a serious substance abuse problem. This assignment may "bump" a client leaving the prison-based treatment from a slot in the residential work release facility, impeding client progress. Currently, we are working with Corrections and the judges to try to alleviate this problem.

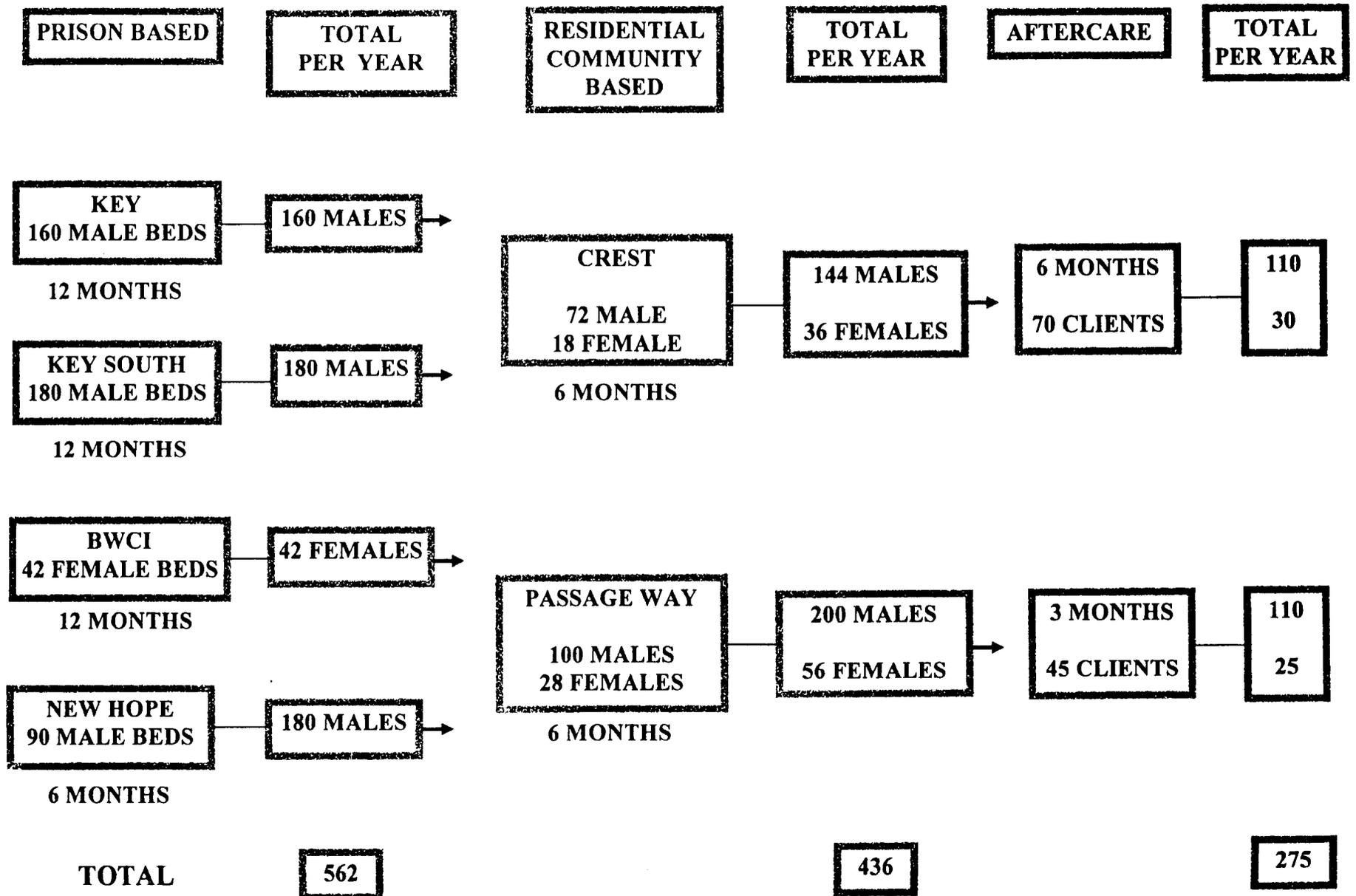
Our outcome data suggest more positive effects for clients who get more of the continuum, so structural barriers to retaining clients in treatment may be important areas for increased attention and increased funding.

TABLE 1.

## Delaware Residential Treatment Programs for Offenders 12/97

Program (since)	Type	Length	Current (#State)	Auth. Capacity 160 90 40 90 128 180 #OJP (49) (10) (0) (10) (56) (150)	Filled?	If no (#vacant)
1. KEY (1989)	prison TC men	12 mos.	(111)	160 (49)	No	41
2. CREST (1992)	workrelease TC m/w	6 mos.	(80)	90 (10)	Yes	
3. Village (1994)	prison TC women	12 mos.	(40)	40 (0)	Yes	
4. New Hope (1995)	prison TC men	6 mos.	(80)	90 (10)	Yes	
5. Passageway (1996)	workrelease TC m/w	6 mos.	(72)	128 (56)	Yes	
6. KEY South (1997)	prison TC men	12 mos.	(30)	180 (150)	No	90

**Figure 1. DELAWARE TREATMENT PROGRAMS FOR OFFENDERS  
AUTHORIZED TREATMENT CAPACITY AS OF DECEMBER 1997**



**Specific Aim 2: To use grant support to access official correctional and criminal justice records to improve our recidivism outcome criteria.**

In previous presented and published studies (e.g., Inciardi et al. *JDI*, 1997) we have found significant reductions in relapse (using both categorical and ordinal indicators) and recidivism Delaware TC treatment clients, as opposed to a comparison group that did not receive treatment. This effect has been demonstrated for periods up to 18 months since release from prison. This follow up period is longer than most reported in the literature; later this month Dr. Inciardi will be reporting on 42-month survey follow up data at the ONDCP conference. Without waiting for those data, however, there exist sufficient number of offenders in our study who were released long enough ago to look at rearrest/recidivism for at least three and up to five years after release from prison. Using data from follow up surveys re-interviewing these subjects and arrest data from the State reporting system that we have added as part of this NIJ initiative, we have begun to examine the effect of TC program participation and other background variables on subsequent length of time to rearrest.

Some data for subgroups that were of early interest to Delaware state officials are presented in Table 2 and Figures 2 and 3. Groups compared here are KEY-CREST completers, CREST only completers, and a comparison group. Characteristics of these 3 groups are shown in Table 2. Figure 2 shows the survival function for rearrest and Figure 3 for reincarceration. It is clear that completing CREST is associated with a significant decreased likelihood of rearrest (Figure 2), and, when rearrested it is apparently for less serious crimes since the gap between the CREST completers and the comparison group increases substantially for reincarceration (Figure 3). Still, the results suggest some attenuation of program effects at four and five years, even for subjects who completed both the in-prison and work release TC. We think this suggests the need for more effective aftercare programs, an area of treatment which was regrettably omitted from the RSAT program funding.

**Table 2. Baseline Sample Characteristics by Group: Delaware Therapeutic Community Continuum Completers and Comparison Group**

	COMPARISON	KEY	CREST	KEY-CREST
<b>N</b>	199	43	107	48
<b>Age (Mean)</b>	29	32	29	31
<b>Age at 1st Arrest</b>	18	15	17	15
<b>Mean # of Times in Prison</b>	3	3	4	5
<b>Mean # of Arrests</b>	9	12	9	10
<b>Males (%)</b>	82	100	77	75
<b>ETHNICITY:</b>				
Whites (%)	29	16	25	15
Hispanic (%)	3	0	4	2
African-Americans (%)	68	84	71	83
<b>PREVIOUS DRUG USE</b>				
Cocaine Use 6 Mos. Prior to Prison	83	97	91	79
Marijuana Use 6 Mos. Prior to Prison	63	76	71	56
Scale of Drug Use 6 Mos. Prior to Prison range: 0 = none to 6 = several times/day	4	5	4	5
<b>Had Previous Drug Treatment (%)</b>	76	100	77	100

Source: Center for Drug and Alcohol Studies, University of Delaware

Figure 2. Delaware Releasees Recidivism Rates: ARREST

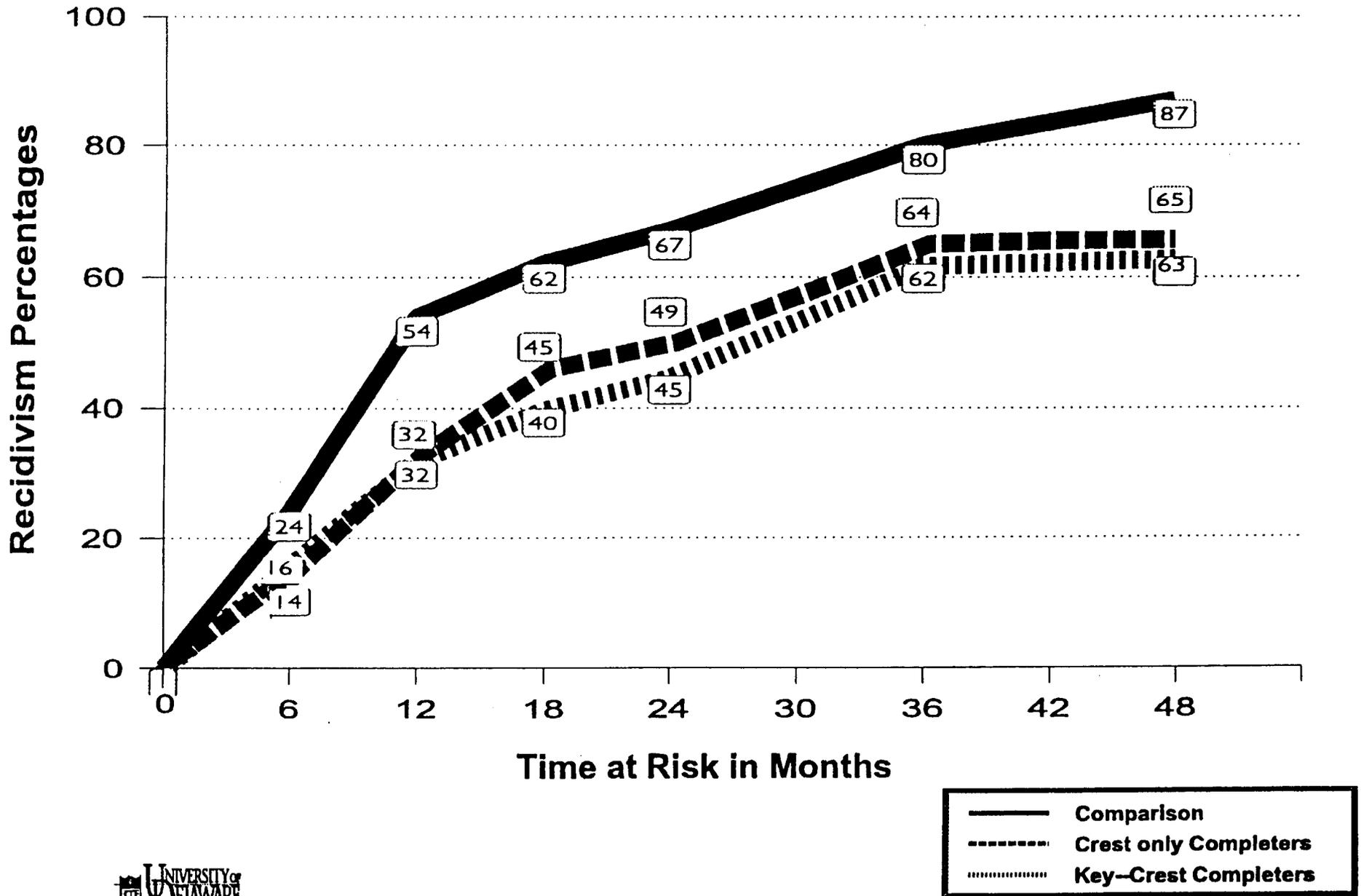
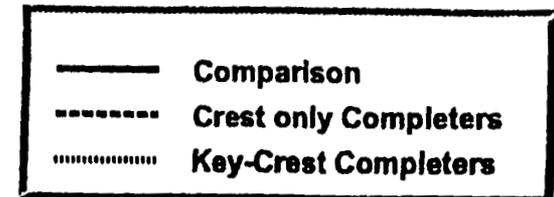
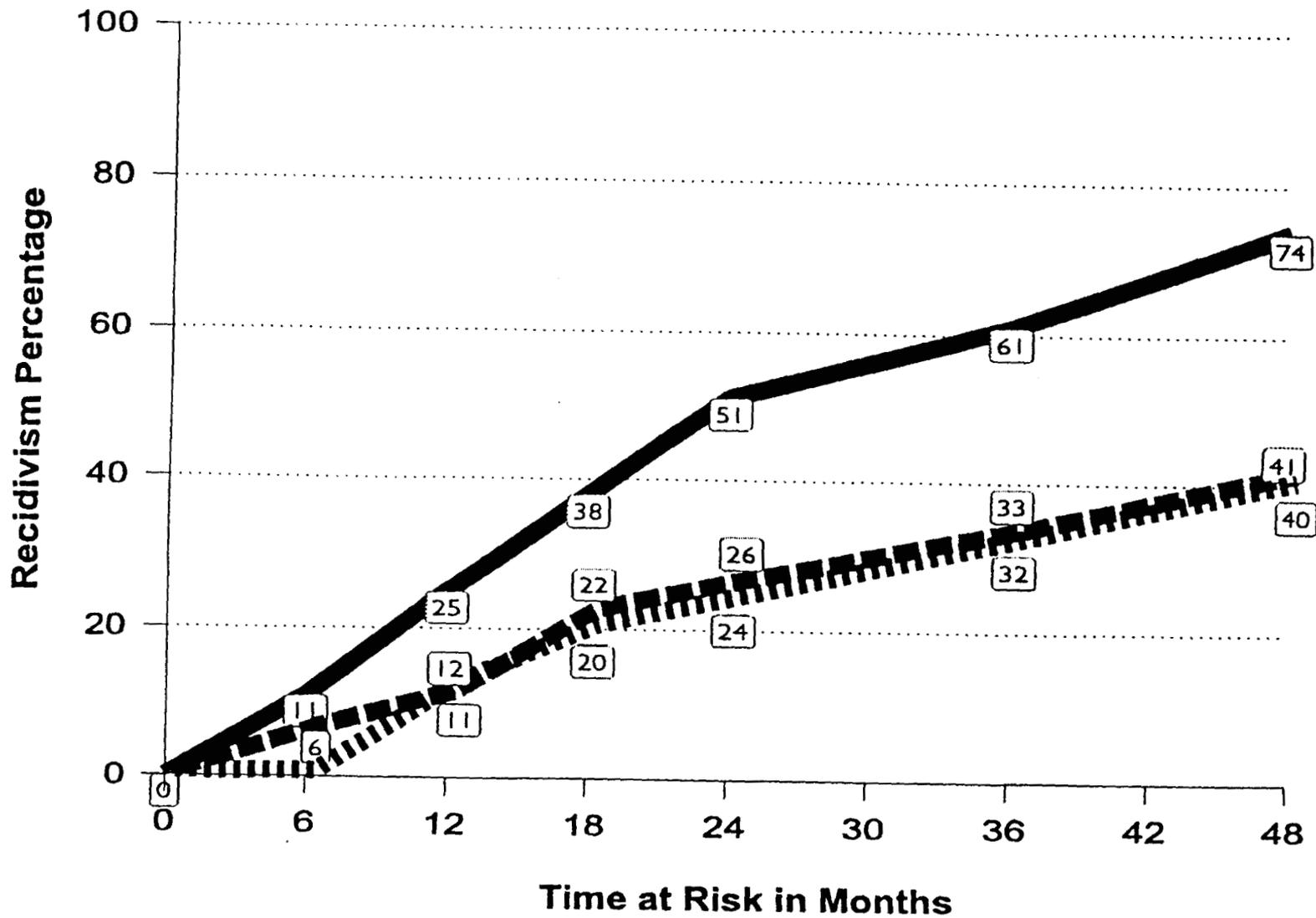


Figure 3. Delaware Releasees Recidivism Rates: INCARCERATION



**Specific Aim 3: To make retrospective use of existing client treatment files to augment already existing outcome evaluation data.**

Although our work is lending support to improving outcomes from participation in the multistage TC, there has not been a thorough assessment of what factors about the TC lead to the significant improvement in treatment outcome. Consequently, we plan to do analyses of treatment success factors among clients who entered the Delaware TC Continuum. By using outcome data from our existing evaluations and by extracting individual level information from previously uncoded client treatment and criminal justice records, it will be possible to provide 12-48 month outcome evaluation results on a relatively large sample of TC treatment clients ( $n \approx 300$ ). We have just gained full access to the backfiles of Delaware client treatment data, and we will be coding these in the next few months related to more investigations of Specific Aim 3.

We have reason to expect that program level variables will have measurable and analyzable relationship to subsequent treatment outcomes. We have done some preliminary analyses with our existing panel data, modelling intermediate or "proximate" outcomes between assignment to CREST and the outcome of maximum frequency of drug use during the period of 18 months after release from prison. These results are shown in Figure 4. The path analysis reveals that much of the effect of TC treatment is attributable to improved treatment retention/treatment engagement, improvement in self-attitudes, and reduction in use of a "gateway" drug (getting drunk) to illegal drug relapse.

These results are not complete, but they are suggestive. Potentially of most interest to correctional treatment providers is the process of specifying some of the mechanisms through which effective TC treatment operates. These preliminary analyses indicate that assignment to CREST did not directly reduce frequency of subsequent drug use. However, the path model indicates that CREST assignment did operate through effects on retention in treatment and improved self-esteem. The data also suggest the importance of reducing relapse to a gateway drug (alcohol). Finally, examining treatment effectiveness in models like those seen in Figure 4 helps to highlight the proximate mechanisms that may be most be important in examining other long-term program impacts such as changes in health status, employment, and health services utilization. Analyses of the program level indicators from the CREST client files should shed more light on these intermediate goals. There may be major payoffs to treatment programs that can achieve these proximate outcomes. Means of engaging, retaining, and rewarding clients in treatment should be further developed.

Figure 4. Path Model Predicting Maximum Frequency of Drug Use During Follow-Up

