

Research Bulletin

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Evaluation of Community Offender Services Programs Drug and Alcohol Addiction and Relapse Prevention - Three Years Out

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Community Offender Services (COS), within Corrective Services NSW (CSNSW) is responsible for the management of offenders serving community-based sentences across 60 NSW district offices. The Drug and Alcohol Addiction Program (DAAP) and Relapse Prevention Program (RPP) were designed to be delivered by Probation and Parole Officers (PPOs) who supervise the participating offenders. These programs formed part of a drug and alcohol intervention strategy aimed to enhance the range of options that PPOs may use to assist community-based offenders under supervision in breaking the cycle of drug dependency and crime. CSNSW received funding from the NSW Drug Summit initiative to develop, implement and evaluate these programs. The first year of the program has previously been reported. This report details findings from the second and third years of program delivery to end September, 2008. Trends are examined on program activity data, participant characteristics and reoffending rates since program inception. At three years out, program effects remain positive with offenders showing marked improvements in levels of drug dependency, stage of change in problem resolution and legal outcomes.

KEY FINDINGS

Throughput

Between September 2006 and September 2008 CSNSW trained 68 Probation and Parole Officers at 28 CSNSW community-based office locations around NSW in the delivery of the Drug and Alcohol Addiction Program and the Relapse Prevention Program. Additionally, 15 Offender Services & Programs program facilitators and five external contractors were trained in the same period.

In the two years to September 2008, 402 offenders participated in the Drug and Alcohol Addiction Program and 116 offenders participated in the Relapse Prevention Program. Slightly more than half (51%) of the individuals who participated in a program went on to graduate during this time.

Impacts and outcomes

Reaching the target population: At program entry, 89% of participants who had committed offences in the three months prior to their current legal order reported that these offences were drug-related and more than two-thirds of participants (71%) were assessed as drug dependent.

Graduates showed marked improvements in levels of drug dependency (41% drug dependent versus 66% at program entry) and motivation to change (82% in the 'Action' stage of problem resolution versus 68% at program entry). There was no discernible program effect on the social functioning levels of graduates.

Program graduates were significantly less likely to have their legal orders revoked when compared with those who failed to complete programs (15% versus 36%).

Program graduates showed a significantly lower rate of re-offending than those who failed to complete programs (37% versus 52%, 24 months after completion of order supervision).

Program graduates showed a lower rate of re-offending than a non-program, matched comparison group (37% versus 43%, 24 months after completion of order supervision).

Early risk factors for program drop-out were injecting drug use, a previous custodial sentence and short duration of prior drug treatment (treatment of less than six months duration).

Definitions and Explanatory Notes

DAAP: The Drug and Alcohol Addiction program (DAAP) is an eight-session program designed to change drug and alcohol dependence by addressing issues relating to resistance and denial. The program includes the addition of short between sessions tasks that aim to reinforce content and processes dealt with in the group sessions. The program aims to assist people to make links between their drug dependence and offending behaviour, change their drug dependent behaviour and move away from the criminal justice system. Completion of the program requires satisfactory attendance at six sessions as a minimum.

RPP: The Relapse Prevention program (RPP) is a twelve-session program designed to maintain abstinence from drugs and alcohol, frequently following the completion of the DAAP or an alternative similar program. The program aims to reduce the risk of a relapse by assisting participants to recognise and address potential triggers for a relapse, implement strategies that increase their awareness of high risk situations and develop self management skills, self control and confidence. Completion of the program requires satisfactory attendance at ten sessions as a minimum.

Drug/s: Includes both illicit drugs and alcohol.

Stage of Change Model: This model was developed by Prochaska and DiClemente and describes the stages through which a person moves in an attempt to resolve an addiction problem.

LSI-R (Level of Service Inventory). This instrument is designed to aid corrections professionals in making decisions regarding the level of service required for an offender. The purpose being to identify dynamic areas of risk/need that must be addressed in order to reduce the likelihood of future criminal activity.

Legal Orders

Order completed: The order has expired.

Order terminated: Supervision has been terminated although the order remains in force. This can be due to the offender being assessed as having satisfactorily addressed his/her criminogenic needs. Ongoing supervision: Probation and Parole continues to monitor offender. Revoked: Court or State Parole Authority has revoked order.

Re-offending: For the purposes of this evaluation re-offending is measured as a return to CSNSW supervision from periods of three months up to two years - either a custodial sentence or a community based order subsequent to completion of supervision (either order discharge or order expiry).

Combined program population: includes participants from Years One to Three (2005-2008) for trend analysis.

INTRODUCTION

Corrective Services NSW (CSNSW) is responsible for the management of around 18,000 community-based offenders in 60 Community Offender Services district offices across the State. This responsibility involves not only managing offenders but also working towards reducing the risk of re-offending. A high proportion of these offenders have alcohol and/or illicit drug problems that are directly related to their offending behaviour. In line with evidence-based correctional practice on "What Works", CSNSW targets program resources to higher risk offenders. These offenders have the most to gain from the interventions and the community in turn benefits from interventions targeted at those who pose the greatest risk of harm.

Community-based corrections is in a pivotal position to address the immediate environmental risk factors for drug misusing offenders. Community corrections is also well placed to provide a link with support services and resources in the offenders' local areas. Furthermore, community-based interventions offer a cost advantage over treatment delivered in custodial settings (Home Office, 1993).

The first report in this series (Furby and Kevin, 2008) noted that while community-based corrections offer advantages for program delivery, most program evaluations have largely focused on custody-based drug interventions. Those evaluations that had been conducted on probation and parole populations tended to focus on supervision type, pre-sentence referral schemes or Drug Courts. Based on studies from the United States, outcome evidence on intensive supervision with drug offenders was found to be equivocal (Martin and Scarpitti, Deschene et al. and Turner et al., cited in Furby and Kevin 2008).

The Magistrates Early Referral Into Treatment (MERIT) and the Drug Court are court administered programs that provide diversion to drug treatment for communitybased offenders in NSW. These programs are subject to ongoing evaluation. In addition to health and well-being improvements, both programs have been found to reduce the likelihood of re-offending. In MERIT the reduction in re-offending at two years was in the order of 10 per cent (Lulham, 2009). Similarly, Drug Court participants were 17 per cent less likely to re-offend than a matched group (Weatherburn, Jones, Snowball and Hua, 2008).

In NSW, once offenders are convicted to communitybased supervision by the courts they come under the management of CSNSW. The agency provides treatment programs to offenders under its management. From 2002, Community Offender Services (COS) of CSNSW adopted a 'menu style' structure of program delivery. This allowed Probation and Parole Officers (PPOs) to 'mix-and-match' program modules to directly target the offence-related needs of offenders. Also consistent with the "What Works" literature, there was sufficient flexibility for the intensity of service delivery to match the level of risk posed by the individual offender. Under this program delivery model, COS developed the sequential group-based programs, Drug and Alcohol Addiction Program (DAAP) and Relapse Prevention Program (RPP) in 2005. This was supported by external funding under the NSW Drug Summit. The Drug Summit firmly committed the NSW government to the expansion of evidence-based intervention services recognising that such an approach prevents abuse and reduces harmful behaviour, and benefits individuals, families and the whole community. A funding requirement was to provide a detailed evaluation on the effectiveness of the programs.

Preliminary evaluation of the DAAP and RPP programs yielded a number of positive findings, both psycho-social and behavioural (Furby and Kevin, 2008). Two-thirds of participants graduated from the programs. Program graduates showed significantly lower levels of drug dependency when compared with program entry levels. There were also significant improvements in levels of change readiness and social functioning. Outcomes in terms of legal order completion and re-offending were largely favourable. Program graduates were significantly more likely to successfully complete their legal orders when compared with those who did not complete the program. A comparative analysis of re-offending rates against a closely matched sample showed that program graduates were 8% less likely to re-offend at nine months. The evaluation also examined the use of diagnostic measures as a basis for treatment matching. Preliminary findings indicated that measures of program readiness and offender risk level were not associated with program completion.

The current report details second phase analysis of a study designed to examine the effects of a CSNSW twotiered, sequential drug treatment program on the drug use, psycho-social status and recidivism of offenders. The study continued to analyse the diagnostic and assessment criteria designed to predict program suitability and success.

EVALUATION METHOD

The comprehensive evaluation strategy was developed in conjunction with the program. The broad aims were to evaluate program effectiveness in terms of reducing drug-related morbidity and improving the legal and reoffending outcomes of participants.

The evaluation further sought to identify critical success factors. This involved the examination of individual effects and program effects (as collected by field staff and researchers). Process methods were ongoing and included an examination of program development and content, roll-out and throughput.

Data collection instruments were selected on the basis of best 'fit' with program aims and content (i.e. measure attitudes and behaviours associated with changes in levels of drug dependency and criminal activity). These were a mix of locally developed and standardised scales recognised in the drug treatment field (**Table 1**). The program entry and post-program measures were compared in order to identify any changes in drug dependence, associated drug-related cognitions and social functioning of participants who completed the program.

Stage One of the outcome evaluation involved the administration of pre- and post-program assessment interviews by field staff prior to program commencement and subsequent to program completion. These standardised assessment interviews were developed for computer-assisted delivery to enable the data to be entered on a portable computer. Field staff received prior training and were instructed to administer the

Table 1: Program data collection instruments

Measurement Instruments	Function
Drug use scale	Documents frequency, recency, quantity and mode of administration of four most used drugs (three months prior to order)
Crime scale	Documents number and type of offences and the direction of relationship between drugs and the same (three months prior to order)
Severity of Dependence Scale (SDS)	Assesses impaired control and anxiety in relation to drug use
Social Functioning Scale (SFS) - a subscale of the Opiate Treatment Index	Examines aspects of social integration, e.g., employment, residential stability, inter-personal conflict, social support and involvement in drug sub-culture
Readiness to Change Questionnaire (RCQ)	Identifies current stage of change in attempts to resolve problem
Drug Taking Confidence Questionnaire* (DTCQ)	Measures confidence to avoid drugs in high risk situations (drug-related self- efficacy)

*This scale applied to RPP only.

interviews as close to program start and end dates as possible and within a two week bandwidth. The average length of time to complete an interview was 30 minutes.

A large matched comparison group (n=1,877 offenders) was selected for re-offending analysis. Offenders were proportionally matched with program participants on demographic and criminogenic factors known to be associated with recidivism.

Data sources

The two primary data sources were the CSNSW Offender Integrated Management System (OIMS) and program data collected through pre- and post-program interviews on the dedicated program database. The extracted datasets used for analysis were as follows:

1. Program activity data were sourced from OIMS. This is the main platform for recording, managing and obtaining information on offenders supervised by CSNSW. OIMS was used to extract demographic as well as program participation and completion data (n=518 participants. These data reflected participations (including duplicate enrolments) and not individuals (n=482 individuals). Nineteen individuals participated in both programs. Seventeen individuals participated in DAAP more than once.

2. A program participant dataset was derived from the pre- and post-program interviews administered by program staff. Most of the program entry information in the report is sourced from the pre-program interviews (n=282). A total of 101 post-program or follow-up interviews were completed. A matched subset of preand post-program interviews (n=80) was also derived.

3. A dataset was derived using OIMS to compare the re-offending outcomes of program graduates with a sample of offenders who were matched proportionally on age, gender, ATSI, legal order type, prior convictions, re-offending risk level, most serious offence type and drug problem criteria (n=1877). The matching method used in the first year of the program was replicated in this longer term study of recidivism outcomes.

Analysis

Analysis of pre-program data was mainly descriptive. Other appropriate parametric and non-parametric tests (McNemar and marginal homogeneity) were used to test for differences in pre- and post-program matched samples. Logistic regression was used to identify factors associated with successful participation in the programs. Comparative analysis was undertaken using Kaplan-Meier survival curves to examine the survival times before offenders returned to CSNSW supervision – either a custodial or community-based order.

The findings are presented separately for DAPP and RPP programs where numbers allowed. Program findings are presented separately for official record data, such as program throughput, demographic and criminal factors and recidivism. Pre- and post- assessment data derived

from the program data base were merged for the two programs due to modest numbers. Merging findings across programs was considered methodologically acceptable as these programs followed the same cognitive behavioural approach and were sequentially linked.

RESULTS

1. Process

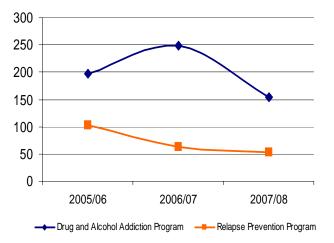
1.1 Program development and delivery

In 2002 funding to develop and deliver a drug treatment initiative was applied for via the reallocation of Drug Summit resources. This initiative sought to address a critical gap identified in group work programs for Community Offender Services (COS). The funding application was subsequently approved for the development and implementation of the Drug and Alcohol Addiction (DAAP) and Relapse Prevention (RPP) programs.

The development and implementation of the programs were outlined in the report on the first year of operation (Furby and Kevin, 2008). Background documents prepared by the COS Program Development and Implementation Unit provided a theoretical and empirical basis to guide the selection and development of the programs. These background documents drew on behaviour change theory and the best practice literature for drug dependent offenders. In addition, consultations were undertaken with both agency advisors and external experts in the drug treatment field. COS intended that these new drug programs would comply with the agency's program accreditation standards that were being developed at the same time.

The early consultation process revealed a lack of 'offthe-shelf' group-based drug treatment programs that satisfied current program standards for the target population. Hence, the development of the programs (DAAP and RPP) was put to tender by COS in May 2004.

Figure 1: Trends in participant numbers: DAAP and RPP (Combined program population:2005-2008)



Source: Offender Management Information System (OIMS)

Subsequently, the draft programs were critically reviewed by the COS tendering committee. Both programs were then piloted at four sites: Albury, Blacktown, Gosford, and Newtown. After reviewing results, minor refinements were incorporated into the program between November 2004 and May 2005.

The outsourcing of program development meant that initial costs were comparatively high. Management posited that these high initial costs would be offset by the programs' increased reach over time with both community and custody-based offenders.

At the time that DAAP and RPP were developed, programs were delineated into custody and community streams. Subsequently in 2008, the Offender Programs Unit embarked on the delivery of a single suite of programs across custody and community corrections. The revised structure was designed to ensure consistently and rigour in program service and delivery. The Unit assesses all programs via a standardised accreditation process. Through this process DAAP and RPP programs were accredited at the Grade 2 level¹.

The first evaluation report (Furby and Kevin, 2008) identified a number of barriers to program implementation and put forward strategies to address the same. For the most part, the strategies were adopted by management in years two and three. In the first year of program delivery some district offices had reported that the strict criteria were excluding suitable offenders and reducing program numbers. The program development team reviewed the eligibility criteria in line with the report's recommendations. From 2006, enhanced funding was provided to district offices to maintain program delivery, assessment and data collection requirements. The staff training program became more strategic with training places determined by staff/offender ratios and other 'capacity to deliver' measures. Training was scaled back to those offices that showed greater likelihood of running the programs based on the numbers of eligible offenders. In 2008, mobile program facilitators were appointed to deliver these programs with both community and custody-based offenders. A total of 68 Probation and Parole officers (PPOs) from 28 district offices were trained in program delivery from October 2006 to end September 2008. Additionally, five external contracted facilitators and 15 CSNSW mobile program facilitators undertook training in this period. Reportedly during training sessions in 2008, both PPOs and mobile program facilitators had requested clarification around their respective roles in the future delivery of these programs under the new implementation structure. As observed in the first year of the program, limitations associated with staff resourcing at district office level continued in years two and three. A number of offices were unable to implement programs or maintain program momentum.

1.2 Electronic-based data collection

The project introduced the collection of pre- and postprogram assessment information by PPOs on a portable computer. These assessment interviews were designed to provide useful case management information to the PPOs and/or program facilitators. In the first year of operation, 89% of those offenders who commenced DAAP and 92% who commenced RPP were administered the electronic pre-program assessment. These rates fell in the following years. In 2006/07, 43% of DAAP and 43% of RPP entrants were administered a pre-program assessment. In 2007/08, the corresponding preprogram assessment rates for DAAP and RPP were 58% and 36% respectively. Post-program interview rates were calculated as the number of interviews as a percentage of the number of program graduates. In DAAP in Year One (2005/06), 68% of program graduates were administered a post-program interview. This figure fell to 20% in 2006/07 and rose to 38% in 2007/08. In RPP there was a larger decline over the period. In 2005/06, 52% of program graduates were interviewed postprogram. The interview rate dropped to 21% in both years two (2006/2007) and three (2007/08). The very low rate of post-program interviews was typically a siterelated issue rather than refusal/non-response from participants.

Year	Program	Programs Run	Number Participated	Number Completed	Completion Rate#
2005 (00	DAAP	16	198	130	65.7%
2005/06	RPP	8	103	69	67.0%
2006/07	DAAP	16	248	109	44.0%
2006/07 RPP	RPP	6	63	29	46.0%
2007/08	DAAP	14	154	78	50.6%
2007/08	RPP	5	53	31	58.5%
	DAAP	46	600	317	52.8%
Total	RPP	19	219	129	58.9%
	Total	65	819	446	54.5%

 Table 2: Trends in output numbers and completion rates for DAAP and RPP – three years of operation

 (Combined program population:2005-2008)

Table Notes:: # Rate = no. completions / no. participants with completed programs x 100. Time periods represent 1st October 2005 to 30th September 2008 (withdrawn no fault n=7 and unknown n= 6 registered as non-completions) Source: OIMS

Table 3: Participant background characteristics: DAAP and RPP Years Two and Three (n= 518 participations)

Factor	Program Participants
Gender (Male)	89.6%
Age (average years)	30.9 (range=18-65 years)
Indigenous background	21.9%
LSI-R* rank med to high	81.4%

* 66 cases (12.7%) had no LSI-R on record. Source: OIMS

1.3 Program Throughput

Program output data were extracted from OIMS including program enrolment details **(Table 2)**. Participation in DAAP increased in Year Two from the first year total of 198. In Year Two (2006/07) there were 248 participations, but this declined sharply in 2007/08 to 154 **(Figure 1)**. RPP did not record participation numbers as high as in the first year of its operation (2005/06). Participant numbers fell to 63 in 2006/07 and 53 in 2007/2008. The total number of offenders serving community-based orders in NSW remained largely stable over this period.

The program completion rate for DAAP fell in Year Two to less than half of all participants, but showed an upward trend in Year Three **(Table 2)**. Completion rates for RPP followed a similar trend to that of DAAP, registering 46% in Year Two and 59% in Year Three.

Overall, slightly more than half (51%) of the individuals who participated (excluding duplicate enrolments) went on to graduate from their program.

As the programs were originally intended to be sequentially linked, DAAP graduates would be expected to go onto RPP (background briefing papers, April 2004). This only occurred for 7% of DAAP graduates in the two years to 2008. In the first year of operation (2005/2006), 12% of DAAP graduates went onto participate in RPP.

2. Participant profile at program entry

The offence and demographic information is based on the 518 program participants in DAAP and RPP in the two years of operation to September, 2008 (Tables 3-5).

2.1. Demographics and criminal profile

The demographic characteristics of the DAAP and RPP participants were comparable. The average age of participants was 30.9 years (range: 18-65 years). There was a higher proportion of indigenous offenders participating in DAAP (24%) during 2006/08 when compared with RPP (18%). However, there was an increase in the proportion of indigenous offenders participating in RPP during 2006/08 when compared with the first year (18% versus 6%). The increased

representation of indigenous participants in the later two years of the programs was largely due to the numbers at one or two sites. Overall, demographic characteristics remained largely constant across the three years of operation.

According to program selection criteria, participating offenders were to be classified by the LSI-R at a medium to high reoffending risk level to be eligible for inclusion in the programs. Of the 452 offenders who participated in the programs with an approved LSI-R rating, 81% were classified as medium or higher. This was slightly lower than the first year rate (89%). The distribution of LSI-R ratings was constant across the last two years of the programs.

Table 4 shows that participants were most likely (57%) to be on probation orders. A higher proportion of RPP participants (33%) were on parole when compared with DAAP participants (20%). The association between order type and program type was statistically significant (χ^{2}_{3} =14.3, p <.01). In the first year of the program there were 43% of RPP participants on parole. This decreased to 29% in 2007/08. However, the overall proportion of offenders on parole remained at around one-quarter. The total proportion of those on probation was relatively constant over the three years ranging between 50-60%.

Overall, 9% of participants were serving more than one type of legal order. Participants were most likely to be serving orders for assault or property offences (**Table 5**). The pattern of offence type has remained broadly similar over the three years with assault being the most prevalent type of offence (**Figure 2**). The proportion of offences involving theft and property fell slightly over the period from over one-quarter to around one-fifth. When offence categories were aggregated to assault, theft, driving, drugs and other a statistically significant association was identified between offence type and program type (χ^{2}_{4} = 27.9, p<.01).

Table 4: Participant legal order type: Years Two and Three

Order	Ald Add	Drug and Relapse Alcohol Prevention Total Addiction Program Program		tal*		
	n	%	n	%	n	%
Probation only	248	61.7	47	40.5	295	56.9
Parole only	82	20.4	38	32.8	120	23.2
More than one type of order	36	9.0	12	10.3	48	9.3
Community Service Order	30	7.5	12	10.3	42	8.1
Unknown	6	1.5	7	6.0	13	2.5
Total	402	100.0	116	100.0	518	100.0

Source: OIMS. Base participations 2006-2008. (%s rounded to 100%)

2.2 Drug use and treatment profile

As DAAP and RPP are sequentially linked programs, participant program entry data were merged to allow for larger numbers. For the most part, the characteristics of the DAAP and RPP participants were comparable. Any differences are reported. Future reporting will use a larger data set and may enable some separate analysis of the programs. Offence and drug use self-reports were sourced from the 282 pre-program assessments collected during the period.

Recent drug-related criminal activity

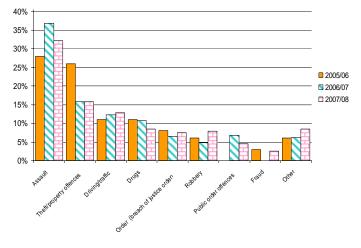
In order to determine the magnitude and severity of recent drug-related offending in the program population participants were questioned on their criminal activity in the three months before their order or sentence. The three-month window was in line with the other preprogram measures on drug use. At program entry, 76% (n=215) of participants reported to have engaged in criminal activity in the previous three months prior to current order or sentence. Participants were also asked whether this criminal activity was drug-related and to identify the causal direction of the relationship. Table 6 shows the breakdown of the types of offences committed by the self-perceived direction or causal link of the drug-crime relationship. By way of example, 34% of all offenders reported committing assault in the previous three months and this was for the most part attributed to drug and/or alcohol use. The majority of participants (89%) who engaged in criminal activity reported that at least one of their offences was committed directly as a result of their drug use. This rate

Table 5: Participant Most Serious Offence: Years Two and Three

Most Serious Offence	Drug and Alcohol Addiction Program		Prev	Relapse Prevention Program		Total*	
	n	%	n	%	n	%	
Assault	148	36.8	31	26.7	179	34.6	
Theft/ property offences	57	14.2	24	20.7	81	15.6	
Driving/ traffic	53	13.2	11	9.5	64	12.4	
Drugs	27	6.7	23	19.8	50	9.7	
Order (breach of justice order)	30	7.5	5	4.3	35	6.8	
Robbery	23	5.7	8	6.9	31	6.0	
Public order offences	26	6.5	4	3.4	30	5.8	
Fraud	3	0.7	2	1.7	5	1.0	
Other	31	7.7	5	4.3	36	6.9	
Unknown	4	1.0	3	2.6	7	1.4	
Total	402	100.0	116	100.0	518	100.0	

Source: OIMS. Base participations 2006-2008. (%s rounded to 100%)

Figure 2: Trends in participants' Most Serious Offences (Combined program population:2005-2008)



Source: OIMS.

was consistent with the rate recorded in the first year of the program (87%). It appears that the majority of the participants continue to be well-matched to DAAP and RPP as these programs primarily address drug use rather than criminal activity.

Drug use background

The main problem drug was defined as the drug most related to the participant's criminal activity. The main problem drug and drug use rates in the three months prior to the current order are shown for both programs in Figure 3. Participants most commonly cited alcohol (48%) as their main problem drug. After alcohol, amphetamines (21%), cannabis (19%) and heroin (6%) were most commonly cited. This was comparable with the rates recorded in the first year of the program with a noticeable reduction in those reporting heroin as their main problem drug. The profile varied between the two programs with 37% of RPP participants reporting alcohol as their main problem drug compared with 52% of DAAP participants. Participants in RPP were more likely to report a 'heavy-end' drug (amphetamines, heroin or cocaine) as their main problem drug. Around 28% of RPP participants reported amphetamines as their main problem drug compared with 19% of DAAP participants. Heroin was cited as the main problem drug by only 12% of RPP participants and 4% of DAAP participants. Over half of participants (55%) reported that their main drug had developed into a problem by 18 years of age. The median age of onset of problem drug-related criminal activity was also 18 years.

In terms of actual drug use behaviour, in the three months before their current order participants most commonly reported using alcohol (62%), cannabis (57%) and amphetamines (35%).

Patterns of main problem drug and actual drug use have changed over the three years of the program. Heroin showed a steady downward trend both in terms of being identified as the main problem drug and actual drug use (**Figure 4**). The trends for other main problem drugs were less consistent with some year on year Table 6: Type of self-reported offence committed by participants in the three months prior to interview and the drug-crime relationship by causal direction: Years Two and Three

Offence type	Offences attributed to drug/alcohol use (%)	Offences that led to drug/alcohol use (%)	Total (%)
Assault	32.6	1.8	34.4
Driving	24.8	5.4	30.2
Property	25.2	1.8	27.0
Drugs	19.9	2.9	22.8
Robbery	13.5	2.1	15.6
Fraud	3.5	0.7	4.2

Base = 282 participations. Set = multiple responses as cases. * Some not attributed to drug or alcohol use. Source: DAAP/RPP Program Database pre-program data

fluctuation. The majority of participants (56%) reported polydrug use (use of two or more drugs). This rate was lower than that reported by participants (62%) in the first year of the program. In 2006-08 around one quarter of program participants (26%) reported recent injecting drug use. The rate was similar across both programs. This rate was consistent over the two years 2006/08, but was lower than the first year rate, in which 39% reported injecting drug use.

Co-existing conditions

LSI-R data on mental health conditions were sourced. One question related to whether the client was undertaking mental health treatment and the other related to whether there was severe psychological interference or psychosis indicated. Of the participants in the two years to September 2008, 15% (n=78) indicated they were having some form of mental health treatment. The LSI-R measure for "severe interference or psychosis" was indicated in 2% of participants (n=12).

Drug treatment history

During 2006-08 82% (n=232) of program participants reported some form of prior alcohol or drug related treatment. This proportion is slightly lower than that reported (87%) in the first year of the programs. The time in treatment measure was based on participants' self-reported total time spent in various forms of drug treatment. Participants had spent a median of four months in drug treatment. The prior treatment time profiles for both programs are shown in Figure 5. Across both programs participants had most commonly spent less than six months in treatment (39%). One-quarter had spent over one year in treatment. However, 18% had spent no time in treatment. The prior treatment profiles of DAAP and RPP participants differed significantly. Over one-third (34%) of RPP participants reported spending more than one year in treatment compared with 22% of DAAP participants. Treatment time showed some relationship to age. Nearly two-thirds (64%) of those under 25 years of age reported less than six months total treatment. This proportion was reversed in the 30 to 40 years age group.

The association between age and time in treatment was only marginally significant compared with the first year of the program. There continued to be a relationship between time in drug treatment and type of main problem drug. Of those whose main problem drug was heroin, 59% had spent more than one year in treatment. In comparison, 28% of those whose main problem drug was amphetamine had spent more than one year in treatment. Both these treatment profiles differ from the first year of the program in which a greater proportion reported having spent more than one year in treatment. For those with alcohol or cannabis problems, prior drug treatment duration continued to be markedly shorter. Only 20% of those whose main problem drug was alcohol or cannabis reported participating in drug treatment for more than one year. Over half of both these groups reported having had no treatment or less than six months treatment.

Of participants, 68% had received more than one type of treatment – this is similar to the rate (70%) recorded in the first year of the program. The most commonly received treatment types were anger management (38%), self-help groups (37%) and structured group programs (36%). Around one quarter of participants had participated in rehabilitation or detoxification programs while a similar proportion were being prescribed anti-depressants.

Around one-third of participants (35%) reported being enrolled in treatment at program entry. This was about the same for both programs. There was a marked difference between programs in those reporting treatment within the 3 months prior to program entry (27% of DAAP versus 47% of RPP participants).

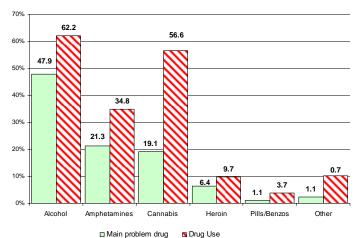
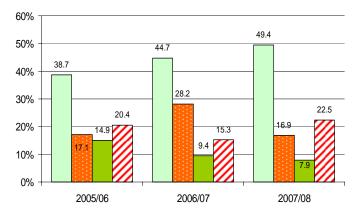


Figure 3: Participant self-reported main problem drug and drug use* in the three months prior to current order: Years Two and Three

*[Drug use = multiple responses as % of cases. n = 279 participations (3 missing cases). Other includes ecstasy, other opiates and illicit methadone. Source: DAAP/RPP Program Database pre-program data]

Figure 4: Trends in participants' self-reported main problem drug (four most prevalent): Combined program population: 2005-2008



□ Alcohol ■ Cannabis □ Heroin ☑ Amphetamines

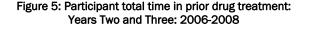
n =443 Source: DAAP/RPP Program Database pre-program data

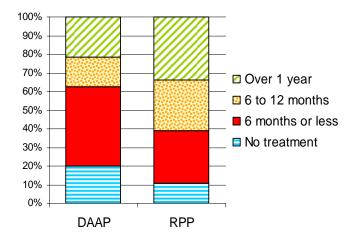
3. Program impacts and outcomes

3.1 Drug morbidity, social functioning, stage of change and drug self-efficacy

Of all participants who were administered a preprogram assessment (n=282) 71% were classified as dependent on their main problem drug at program entry. Hence, the programs appeared to be largely reaching the target population on drug-related criteria. Standardised measures used to summarise participants' drug-related morbidity, social functioning and stage of change are shown in **Table 7**. There were 80 matched pre- and post-program interviews for the two years to September 2008.

A comparison of program entry and post-program measures on the Severity of Dependence Scale (SDS) was undertaken using a non-parametric McNemar test. At program entry, 66% of participants with matched scores were classified as dependent on their main problem drug. At program completion, 41% were classified as dependent and this difference was

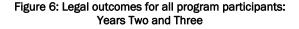


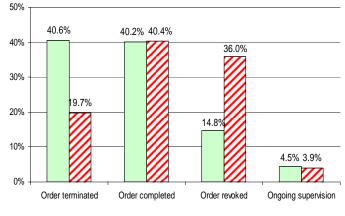


n = 279 participations (3 missing cases). Source: DAAP/RPP Program Database preprogram data

statistically significant (p<.005). The SDS has a cut-off score that indicates dependency and is also an indicator of the severity of dependence by the value of the score. Using the measure in this way a reduction was shown in the mean score between the pre- and post-program participant measures. The mean score declined from 5.7 at program entry to 3.2 at post-program stage and this was statistically significant (t⁷² = 4.7, p<.001).

Using a comparison of matched pre- and post-program scores on the Social Functioning Scale (SFS), 18% of participants showed poor social functioning at program entry compared with 15% at program completion. In the first year of the program, there was a significant improvement in social functioning on program completion. In years two and three, post-program scores showed improvement on scale items connected with living or associating with other users of their problem drug.





Completed DAAP/RPP Did not complete DAAP/RPP

Source: Offender Integrated Management System n = 484 (34 missing cases -1 interstate transfer).

The Readiness to Change Questionnaire (RCQ) provided a measure of stage of change in problem resolution, and by inference, program readiness. A small number of participants (9%) were at the pre-contemplation stage at program entry. Pre-contemplation is defined as failing to recognise the problem behaviour. Less than one quarter (23%) were at the contemplation stage at program entry. Contemplation is defined as recognition of problem behaviour and early thoughts about change. At program entry, most participants (68%) appeared to be at the stage that both programs aimed to achieve with participants (action stage). When compared with the program entry rating, a greater proportion of participants were in action stage at program completion (82%). This difference was found to be statistically significant using a marginal homogeneity test (p<.05).

The Drug Taking Confidence Questionnaire (DTCQ) was administered to RPP participants to ascertain high risk situations for drug use and perceived self-efficacy in resisting drug use in these situations. A total score can also be derived and the means of the pre- and postprogram group scores compared. For the first three years of the RPP program, 39 pre- and post-program questionnaires could be matched that contained a score for the DTCQ. While there was a difference in the mean score in between the pre- (86.9) and post-program (89.7) interviews, which indicates increased situational confidence post-program, this difference was not statistically significant (t^{38} =-1.25, p=.25). The results cannot be seen as conclusive given the small sample size.

3.2 Supplementary treatment

At program entry, 11% reported recent (within the last three months) or current attendance at self-help groups. At program entry, only 4% reported current attendance. Of those who reported having ever attended self-help groups, 24% were current or recent attendees at program entry.

Of the 101 program participants interviewed postprogram, 47% reported having participated in at least one other form of treatment simultaneously while undertaking DAAP or RPP. This excludes those reporting group-based AOD programs as they appeared to be reporting the program itself as an additional form of treatment.

The course literature for DAAP and RPP specifies that participants are expected to attend twice weekly AA/NA/ SMART Recovery or a similar program (self-help groups). Based on post-program interviews, during time in program just 14% of DAAP participants had satisfied this requirement of concurrent self-help group attendance. This was comparable with the first year of the program (13%). Of the small number of RPP participants interviewed post-program, none reported attending these groups.

3.3 Factors associated with program completion

In an attempt to identify factors associated with program completion, data were merged from the entire three years of the program. For this purpose, a

comprehensive data set was derived from pre-program interviews and official records.

The initial bi-variate analysis of these factors is shown in **Appendix 1.** Some of the factors identified as significant in the first year of the program (Furby & Kevin, 2008) were not found to be significant in this analysis. While there were observed differences in completion rates between groups of offenders in terms of criminal and drug history, very few of these were statistically significant. Gender, which had been a significant factor in completion in the first year, due to a high female completion rate was not confirmed over the three years of the program. Injecting drug use (p=.002) and polydrug use (p=.03) remained significantly associated with program drop-out. The stage of program readiness was of borderline significance with those in contemplation stage at program entry showing a substantially higher completion rate. This was also the case in the first year of the program.

To identify which variables were predictive of successful program completion, logistic regression with backwards elimination was performed. The explanatory variable set was examined to identify any significant correlations that could influence the multivariate analysis results. In the multivariate analysis, 16 variables were included to allow for any confounding effects that were not controlled for in the uni-variate analyses. The included variables were modified (recoded as dichotomous) except for age. The output ordered in terms of significance is listed in **Appendix 2**.

The final model in **Table 8** shows the combination of variables most significant in predicting program outcome. An inclusive cut-off of 10% was used giving more emphasis to the best overall model of predictors as opposed to individual effects. This combination of factors is broadly consistent with the model derived in the first year of the programs (with the exception of polydrug use and gender). The association between these factors and program completion also makes intuitive sense. As in the first year of the programs, injecting drug users were around half as likely to complete as others and this result showed a higher level of significance. Being in the contemplation stage of

Table 7: Outcome profile of participants - drug morbidity, social functioning and stage of change: Years Two and Three*

Measure	Outcome	Percentage of participations		
		Pre-program	Post-program	
Severity of Dependence Scale (SDS)+	Dependent on the main problem drug	66.3%	41.1%	
Social Functioning Scale (SFS)	Poor social functioning	17.9%	15.3%	
	Pre-contemplation stage	9.3%	1.4%	
Readiness to Change Questionnaire (RTCQ)#	Contemplation stage	22.7%	16.7%	
	Action stage	68.0%	81.9%	

*Based on 80 pre- and post matched participant interviews for DAAP and RPP (+5 missing cases # 2 missing cases). Source: DAAP/RPP Program Database

problem resolution and drug dependency at program entry were predictors of program completion. A previous custodial sentence and less than six months prior drug treatment were predictors of program non-completion. Recent or current attendance at self-help groups was of borderline significance in predicting program completion.

The final model was significant (χ^2 =26.7, df=6, p<0.01) and was a good fit (Hosmer-Lemeshow χ^2 =7.4, df=8, p=0.49). These findings confirm injecting drug use as a predictor of failure to complete the program. The combination of drug use, motivation, criminal history and treatment factors continue to be predictive of completion when other factors are controlled.

3.4 Legal outcomes

Order completion occurs as a result of expiry date of an order. Order termination may come about as a result of offenders addressing their criminogenic needs while under supervision and this can include the successful completion of programs. However, this provision for early termination does not include those on Parole Orders or Community Service Orders. For current purposes, order completion or termination status was used as a broad measure of program success. A comparison of legal order outcomes for program graduates and program non-graduates is shown in Figure 6. Program graduates were twice as likely to have their order terminated as non-graduates (41% versus 20%). The association between program termination and order outcome was statistically significant (χ^2 =27.1, df=2, p<.01). Non-graduates were over twice as likely to have their orders revoked when compared with graduates (36% versus 15%). Program graduates and non-graduates were equally as likely to have completed their orders.

3.5 Recidivism

3.5.1 Return to CSNSW

Re-offending rates for program participants were measured at three monthly intervals from the time of completion of order supervision. Rates of re-offending were also measured by the survival time before an offender returned to CSNSW supervision after completion of their order supervision. This was measured from when an order was discharged (i.e. supervision was terminated) or when the order expired whichever occurred first. Within the overall program population there were 752 participants (424 of whom were graduates) who had completed their order at least three months earlier. Those not completing the programs showed a higher re-offending rate than those who completed. At three months after order completion, 9% of those who completed the programs were returned to CSNSW supervision, either on an order or imprisonment. Of those who did not complete, 15% returned to CSNSW supervision (Table 9). This difference tended to increase significantly over time. At 24 months, the comparative figures were 52% of those who did not complete returning to supervision compared with 37% of program graduates (z=-4.25, p <.001). In both programs, graduates were less likely to return to any form of CSNSW supervision than non-graduates at any reference period in the 24 months following completion of their orders. The re-offending rates of RPP non-graduates were lower than those of DAAP nongraduates at most reference periods post-order. Although, at 24 months this difference was negligible. At 24 months post-completion, RPP graduates (37%) showed an equivalent rate of re-offending as DAAP graduates (36%).

3.5.2 Recidivism of program graduates versus matched comparison sample

In a further attempt to determine whether the programs had an effect on recidivism, the re-offending rates of graduates were compared with a large non-program,

Variable Catego		ategory Odds Ratio		ence Interval	Significance
Valiable	Category		Lower	Upper	Significance
Injecting drug user	Yes	0.48	0.31	0.73	0.00
Contemplation stage (program entry)	Yes	1.76	1.08	2.85	0.02
Previous custodial sentence	Yes	0.64	0.40	1.03	0.07
Less than 6 months total drug treatment	Yes	0.70	0.47	1.05	0.09
Drug dependent	Yes	1.44	0.94	2.19	0.09
Recent self-help group attendance	Yes	1.59	0.91	2.80	0.11

Table 8: Independent program entry predictors of program completion – logistic regression final model

			Drug and Alcohol Addiction Program		Relapse Prevention Program		Total	
		Completed	Did not complete	Completed	Did not complete	Completed	Did not complete	
	% re-offend	9.2%	16.0%	8.5%	8.5%	9.0%	14.6%	
3 months	no. re-offend	27	41	11	6	38	48	
	Total	295	257	129	71	424	328	
	% re-offend	14.6%	28.0%	13.3%	16.9%	14.2%	25.6%	
6 months	no. re-offend	43	72	17	12	60	84	
	Total	295	257	128	71	424	328	
	% re-offend	21.0%	33.9%	18.8%	25.7%	20.3%	32.1%	
9 months	no. re-offend	62	87	24	18	86	105	
	Total	295	257	128	70	423	327	
	% re-offend	25.2%	38.8%	23.6%	29.0%	24.7%	36.7%	
12 months	no. re-offend	74	99	30	20	104	119	
	Total	294	255	127	69	421	324	
	% re-offend	28.8%	42.7%	26.2%	36.2%	28.0%	41.4%	
15 months	no. re-offend	84	109	33	25	117	134	
	Total	292	255	126	69	418	324	
	% re-offend	31.4%	46.2%	31.5%	44.8%	31.4%	45.9%	
18 months	no. re-offend	91	117	39	30	130	147	
	Total	290	253	124	67	414	320	
.	% re-offend	34.0%	51.4%	35.0%	46.3%	34.3%	50.3%	
21 months	no. re-offend	98	127	43	31	141	158	
	Total	288	247	123	67	411	314	
	% re-offend no. re-offend	36.4% 103	52.9% 127	37.2% 45	50.7% 34	36.6% 148	52.4% 161	
24 months					• ·			
	Total	283	240	121	67	404	307	

Table 9: Percentage and number of participants re-offending — return to CSNSW (Combined program population:2005-2008)

Source: OIMS. Those with less than three months time to re-offend excluded. n = 751 at three months (withdrawn no fault n = 7 and unknown n = 6 excluded).

Table 10: Proportion and numbers re-offending – program graduates v. matched comparison sample (Combined program population:2005-2008)

	Program Graduates				Comparison		
	Number return to CSNSW	% return to CSNSW	Total	Number return to CSNSW	% return to CSNSW	Total	
3 months	38	9.0%	424	170	9.1%	1877	
6 months	60	14.2%	424	310	16.5%	1876	
9 months	86	20.3%	423	427	22.8%	1876	
12 months	104	24.7%	421	533	28.4%	1876	
15 months	117	28.0%	418	623	33.2%	1876	
18 months	130	31.4%	414	686	36.6%	1876	
21 months	141	34.3%	411	746	39.8%	1874	
24 months	148	36.6%	404	795	42.5%	1870	

Source OIMS. Comparison group n=1877. Program graduates n=424

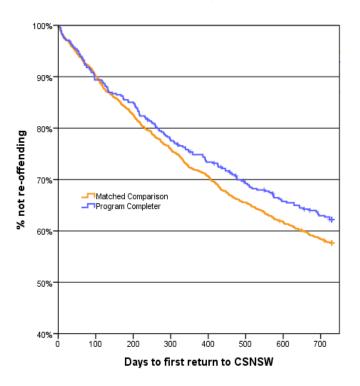
matched sample (who had not undertaken the program). This sample was proportionally matched with program participants on characteristics found to be associated with recidivism (see Methodology).

In comparing the re-offending rates of the program graduates with the comparison sample there were some notable differences (Table 10). In the first three months post-order, re-offending rates were identical (9%). However, from 15 to 24 months offending rates post-order were between five per cent and six per cent lower in the program graduate group when compared with the comparison sample. Figure 7 shows the respective survival times to re-offence for the two groups. Per-protocol survival analysis was used to compare program graduates with the matched sample (controls). While graduates survived for longer (as shown by the blue line), Kaplan Meier survival analysis did not show a significant difference in the overall survival times between the two groups (log rank χ^2 =2.67, df=1, p = .102).

3.5.3 Recidivism summary

For those offenders who participated in the programs, completion versus non-completion was significantly associated with reduced re-offending. Program completers also showed longer survival times when compared with the non-program matched sample. However, the difference in survival times between completers and the matched sample was not statistically significant. Matching offenders is complex and there is the possibility that many in the comparison sample may have had less severe drug-related problems and/or experienced other interventions. Therefore, these findings should be interpreted with some caution.

Figure 7: Re-offending survival function – program graduates v. matched comparison sample (Combined program population: 2005-2008)



DISCUSSION

This study examines the continuing progress of the Drug and Alcohol Addiction and Relapse Prevention programs (DAAP and RPP) implemented by Community Offender Services, CSNSW. These programs are funded by the NSW Drug Summit initiative. Results from the first year of program implementation pointed to program successes (Furby & Kevin, 2008).

The current report presents further findings from years two and three of the programs' implementation. It continues documentation of the development, elements and delivery of the programs. Pre- and post-program assessments have been used to measure program effects in terms of changes in participant behaviour.

The first year report showed program documentation and the planning and development process to be thorough. DAAP and RPP were assessed as being highly structured programs designed for systematic delivery with good quality audio visual aids.

Program throughput

Overall program participation numbers have declined since the first year of the program. RPP numbers declined steadily over this period to half the number recorded in Year One. DAAP numbers increased in Year Two and then fell below the first year total in Year Three to be twenty five per cent lower when compared with Year One. Records showed a number of the district offices that ran DAAP and RPP in the first year discontinued running DAAP and RPP in 2008.

The decline in program numbers cannot be accounted for by a fall in the number of offenders managed by COS. The offender population has been largely stable over this period. Further, barriers to program implementation as identified in the first report have, for the most part, been addressed by management. Staff training places are now determined by staff/offender ratios and other capacity to deliver measures. Enhanced funding has been provided for delivery, assessment and data collection requirements.

Despite these initiatives, limited staff resources have been reported with some offices reportedly unable to implement programs or maintain program momentum. The decline in program numbers in 2008 also coincided with the transition to a new program delivery structure. This involved the appointment of mobile program facilitators to deliver a range of programs at district offices. A sense of uncertainty around the roles of PPOs and program facilitators in program delivery and data collection respectively was evident during training sessions in 2008. This may have delayed decisions by PPOs to run programs. As is commonly the case with structural change, this was a period of adjustment for field staff and it was understandable that some finetuning was required over the course of the roll-out. That said, limited staff resources would, for the most part, account for the decline in program activity over the period.

In the first year of program implementation, the program completion rate was similar for both programs (around two-thirds). This was found to be in line with programs in NSW designed for community-based offenders, such as MERIT and the Drug Court. Overall the program completion rate has fallen by around ten per cent with just more than half of participants completing their program in 2007/2008. This declining trend was more evident in DAAP. RPP completion rates fluctuated over the period, which could be due to the nominal numbers.

Despite the downward trend in program delivery, around 250 offenders completed DAAP/RPP in the two years to October 2008.

Study limitations

While the programs are suited to evaluation using repeated measures, they require substantial data collection at program entry and exit. Just over half of participants were administered a pre-program assessment. There was a further data collection shortfall in the post-program interview phase. About one-third of graduates had matched pre- and post-assessments. While there remains sufficient numbers for the overall examination of program effects, the further analysis of sub-groups is limited. The shortfall in numbers limits the examination of the different effects of DAAP and RPP and different type of offenders.

Commonly, after the launch of a new program there will be considerable activity followed by a downward trend in delivery. The decline in staff motivation flows onto the data collection process. It is generally acknowledged that this is a common challenge in program delivery settings. An ongoing promotional strategy may mitigate these barriers to ongoing delivery.

Some offices implemented programs without undertaking the associated pre- and post-program assessment interviews. Findings were suggestive of a continued need to 'market' the evaluation in order to ensure that front-line staff maintains data collection at levels consistent with evidence-based evaluation requirements. The first report in this series (Furby and Kevin, 2008) raised the issue of deficiencies in data collection. The report also recommended a formal communication structure be put into place emphasising the need for accountability for optimum evaluation outcomes.

Program effects

These programs were designed for those offenders whose drug use raises the probability of criminal behaviour. Findings showed that the programs continue to be reaching their target population. A large majority of program entrants were classified as dependent on their main problem drug and reported that their recent criminal activity was driven by their drug use.

DAAP continued to be effective in achieving the goal of assisting participants in progressing to the 'action stage' in terms of motivation to change behaviour. However, the program entry assessment continued to show that the majority of DAAP participants were already in the 'action stage' of change. Consistent with this, it was found that a large proportion of DAAP participants had participated in prior drug treatment. The first report in this series recommended that DAAP selection criteria be revisited with a view to targeting young offenders with low exposure to prior drug treatment and this still holds true.

The program requirement of facilitating attendance at self-help groups while completing DAAP/RPP remains problematic. It continued to be evident that only a small minority of participants concurrently attended self-help groups. It is noteworthy that recent attendance at selfhelp groups was a borderline predictor of program completion. This is consistent with findings on the first year of operation (Furby and Kevin, 2008). There remains a case for review of this program element. A systematic procedure for promoting ongoing self-help group attendance might improve the delivery of this program element.

As a measure of program success, program graduates were half as likely to have their legal order revoked than those who did not finish the programs. Graduates were more likely to have their legal orders terminated early than those who did not finish. Early termination of legal orders represents a cost-saving for community corrections. Graduates were also significantly less likely to re-offend than those who did not complete the programs. Overall, current findings suggest that strategies designed to improve program retention numbers should be introduced in order to maximise completion rates.

It shows promise that at two years after completion of order, the re-offending rate of program graduates was six per cent lower than that of the matched sample. There are possible caveats to these findings, in that matching is imperfect and there is always the possibility of omitted variable bias. The comparison sample may have varied with program graduates on a factor or factors not covered in the analysis and this potentially had a biasing effect on the findings. Hence, these findings should be interpreted with some caution.

Despite the declining trend in program delivery, positive program effects continue to be identified. The programs will continue to be delivered and the evaluation of the programs reported. The final evaluation report will document five years of program implementation. This will provide more conclusive findings on the success of the programs and factors critical to that success.

RECOMMENDATIONS

The following strategies are intended to improve program delivery in CSNSW and to enhance offenders' *Throughcare* prospects. A number of strategies recommended in the first report, such as the revision of program eligibility criteria, training places linked to office capability to deliver and enhanced funding for assessment and data collection requirements have been implemented by management. The listed strategies build on those put forward in the first report as current findings reinforce their importance.

Quality Assurance

- Provide clear policy and guidelines for Probation and Parole Officers and mobile program facilitators that include the delineation of roles in program selection and delivery.
- Implement a more proactive, systematic approach to ongoing self-help group involvement that can be incorporated into program delivery.
- Continued linkage of program funds to the collection of assessment data for evaluation purposes by field staff.
- Develop effective strategies to schedule the administration of the pre- and post- program assessment interviews.
- Continued refinement of training resources to promote and maintain program momentum.
- Future training to address the data quality issues that have been identified to ensure accuracy in the reporting of outputs and outcomes. This applies to participant assessment data collected onsite and also program activity data recorded on OIMS.

ENDNOTE

1. Grade 2 Accreditation. According to agency guidelines to gain Grade 2 Accreditation (Accepted program for Accreditation) program efficacy must have been demonstrated in results from a study with acceptable methodology which reflect statistically significant changes in behaviour/ cognitions/attitudes/skills/or meeting other specific program goals. In most cases this will be achieved by a study design utilising a minimum of pre and post program testing of offender attitudes, knowledge and behaviours using standardised tools or other measurable outcomes. The program must substantially meet all Accreditation Criteria.

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Appendix 1: Factors associated with prog	am completion (progran	n entry measure) using chi-sa	uare analysis

Variable	Number	Completion rate	Significance
Injecting drug user	Yes (n=166)	53%	χ ² 1 = 9.5, p=.002
injecting unug user	No (n=332)	67%	χ-1 – 9.5, p=.002
Polydrug user*	Yes (n=295)	68%	χ ² 1 = 4.6, p=.03
, 0	No (n=205) Pre-contemplation (n=25)	58% 60%	<i>70 7</i> 1
Readiness to Change	Contemplation (n=109)	80 <i>%</i> 72%	$\chi^2_2 = 5.2, p=.07$
stage* (program entry)	Action (n=371)	60%	λ , μ
Social functioning	Low/below average (n=136)	57%	
level*	Other (n=366)	64%	χ² ₁ = 2.6, p=.11
Recent [@] self-help group	Yes (n=75)	71%	χ^{2}_{1} = .2.6, p=.11
attendance	No (n=428)	61%	χ-12.0, ρ11
Previous custodial	Yes (n=389)	60%	χ ² 1 = 2.4, p=.12
sentence	No (n=117)	68%	λ 1 2.4, β .12
Prior CSNSW contact	Yes (n=435)	61%	χ ² ₁ = 2.3, p=.13
	No (n=71)	70%	~ .
Drug dependent*	Yes (n=352)	64%	χ² ₁ = 1.4, p=.24
	No (n=150)	59%	χ =, μ .= .
LSIR Medium to High	Yes (n=221)	60%	χ² ₁ = 1.3, p=.27
	No (n=150)	67%	χ, μ
Order type parole	Yes (n=161)	60%	χ² ₁ = .69, p=.41
	No (n=345) < 3 months (n=175)	63% 59%	
Time in prior drug	3 months – 1 year (n=152)	66%	χ ² ₂ = 1.7, p=.42
treatment*	Over 1 year (n=176)	62%	
	Alcohol (n=214)	66%	
	Amphetamines (n=109)	59%	χ ² ₄ = 3.6, p=.47
Main problem drug	Cannabis (n=97)	61%	χ-4 - 3.0, p47
	Heroin (n=55)	55%	
	Other (n=29)	62%	
Frequent drug/alcohol	Yes (n=360)	61%	χ^2_1 = .62, p=.47
USE1*	No (n=138)	65%	<i>N</i> - <i>1</i>
Recent [®] drug	Yes (n=271)	61%	χ² ₁ = .46, p=.52
treatment	No (n=235)	64%	
Aboriginal/Torres Strait	Yes (n=86)	59%	χ² ₁ =.42, p= .52
Islander*	No (n=419)	63%	λ, μ
Unemployed* (not worked in past 3	Yes (n=260)	59%	χ ² = .08, p=.78
months)	No (n=236)	67%	λ .00, ρ .10
	18 - 24 Years (n=81)	69%	
• • • •	25 - 30 Years (n=122)	58%	
Age group*	31 - 35 Years (n=112) 36 - 40 Years (n=97)	64% 64%	χ²₄ = 1.8, p=.78
	41+ Years (n=92)	64% 59%	
	Male (n=471)	62%	
Gender	Female (n=35)	63%	χ² ₁ = .006, p= .94
Years of schooling	10 years or less (n=332)	62%	χ ² 1 = .004, p= .95
. sale et solloomig	More than 10 years (n=174)	62%	Λ ± .00-, ρ .00

 1 Frequent use = 4 times or more times per week. @ Recent = current or treatment within the last 3 months

* Undecided, unknown, refusal excluded (numbers vary for each variable)

Appendix 3: Progr	am entry predictors	of program completion	- univariate logistic regression
, appointer, or i rogi			

Variable	Odds Ratio	95% Confidence Interval		Significance
Valiable		Lower	Upper	Significance
Injecting drug user	0.54	.327	.878	.013
Less than 6 months total drug treatment	0.65	0.42	1.00	.017
Contemplation stage (program entry)	1.77	1.063	2.940	.028
Drug dependent	1.59	.994	2.491	.053
Recent self-help group attendance	1.81	.983	3.337	.057
Age group	1.14	.985	1.328	.079
Previous custodial sentence	0.67	.404	1.119	.126
Social functioning level	0.76	.478	1.215	.253
Polydrug use	0.79	.494	1.248	.306
Recent drug treatment	0.85	.548	1.307	.451
Aboriginal/Torres Strait Islander	0.85	.503	1.451	.560
Order type parole	0.91	.581	1.441	.701
Main drug alcohol	1.06	.660	1.707	.806
Gender	0.93	.421	2.052	.857
Frequent drug/alcohol use	0.96	.586	1.587	.886
Years of schooling	0.97	.637	1.481	.893

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