



Justice &  
Attorney General

Annual Report

# 2008 MERIT

Magistrates Early Referral Into Treatment Program



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## KEY FINDINGS

This report by the National Drug and Alcohol Research Centre (NDARC), University of New South Wales (UNSW), provides the New South Wales (NSW) Department of Justice and Attorney General with an independent assessment of the activities and efficacy of the *Magistrates Early Referral Into Treatment* (MERIT) program during 2008. The key findings from the report are that:

- Between 1 January and 31 December 2008 there were 2,731 referrals to the program; a 7 per cent reduction (of 218 referrals) on the previous year. Solicitors and Magistrates accounted for 75 per cent of the referrals to MERIT during 2008. With the exception of a family member/friend and Magistrates, the number of referrals to MERIT from all remaining referral sources fell between 2007 and 2008.
- Of the 2,731 referrals in 2008, two-thirds (n=1,810) were accepted onto the program. The most common reasons for non-acceptance included having no demonstrable drug problem, being unwilling to participate and not being eligible for bail. One in five (21%) referred defendants during 2008 had previously been referred to MERIT – a rate identical to 2007.
- The average (median) age of those both referred and accepted was 29 years. In line with activity during recent years, around one in five referrals (20.5%) and acceptances (22%) to the MERIT program during 2008 were female. However, for the first time referred women (72%) were significantly more likely to be accepted onto the program than males (66%). Eighteen per cent of referrals to MERIT during 2008 identified as Aboriginal or as a Torres Strait Islander. This is an increase from 2007 (16.1%) and the highest proportion of Indigenous status referrals since the program commenced in 2000.
- Cannabis was the principal drug of concern for nearly half (46.6%) of all accepted defendants during 2008. Stimulant users accounted for over one in four cases accepted in 2008 (27.8%) and narcotic drug users represented one-fifth of the caseload (20.6%). Heroin was the principal drug of concern for most narcotic using defendants. However, this was the lowest proportion of principal heroin users accepted onto MERIT (18.6%) since the program began in 2000.
- Illicit drug offences and theft and related offences were the most common charges faced by MERIT defendants - for both those referred to and accepted by the program in 2008. Principal cannabis users comprised the largest group charged with illicit drug offences (59%). By contrast, users of narcotics were the group most likely to be charged with theft and related offences (40%).
- Sixty-nine per cent of MERIT participants exited the program during 2008 having met all program requirements. This is the highest rate of completion recorded for accepted participants throughout the life of the MERIT program. By contrast, the rate at which defendants were breached by the MERIT team for non-compliance with program requirements was lower in 2008 than at any point since the start of the program in 2000.

- There were statistically significant reductions in both the frequency and intensity of all forms of self-reported substance use amongst accepted MERIT participants in 2008. The largest reductions were recorded for the reported use of cannabis and amphetamines. However, for most participants, levels of dependence on illicit drugs upon exit from MERIT continued to exceed established thresholds for dependency using validated measures.
- Defendants starting the MERIT program during 2008 had a poorer physical and mental health prognosis than the general population. Upon exit from the program there were significant improvements in both general and mental health and vitality and social functioning, moving the MERIT sample above the Australian population average in four of eight assessed domains. There were also significant reductions in the levels of self-reported psychological distress experienced by MERIT defendants following their contact with the program.
- Defendants accessing support from the MERIT team with the highest program completion rate in 2008 were three times more likely to complete the program than those accessing support from the team with the lowest rate of completion. The results of our regression analysis indicate that aspects of service delivery were more important in predicting the likelihood of completing a MERIT program in 2008 than the characteristics or circumstances of defendants.
- Twelve months after exiting the MERIT program in 2007, 41.6 per cent of defendants had been reconvicted for a further offence. However, program non-completers in 2007 were significantly more likely to be reconvicted for another offence during the 12 weeks in contact with MERIT (38.7% vs.13.3%), and in the six (42.3% vs. 22.9%) and 12 months (53.8% vs. 35.7%) following program exit (all at p=0.000).
- As MERIT reaches its tenth operational year there would seem to be considerable scope for harnessing the wealth of knowledge and experience accumulated by the program during this time in order to further refine and improve it's overall effectiveness. Our analysis offers some pointers for taking this work forward. In the first instance this could entail a greater focus on: (i) improving knowledge and understanding about the causes of non-completion; and (ii) developing compliance strategies tailored specifically for those groups identified by our analysis as presenting with a high risk of program non-completion (i.e. young defendants, Indigenous participants and users of stimulants and narcotics).
- Given the greater propensity for involvement in serious acquisitive crime amongst users of stimulant and narcotic drugs, it seems likely that the crime prevention impact of MERIT would be further enhanced by developing treatment engagement strategies targeting these particular groups once they are accepted onto the program.

## 1. INTRODUCTION

### 1.1 Background to the program and previous research

Launched in 2000, the *Magistrates Early Referral Into Treatment Program* (MERIT)<sup>1</sup> was one of five diversionary initiatives to emerge from the recommendations of the New South Wales (NSW) Drug Summit in 1999. The initiative has expanded following a successful pilot of the program in the Northern Rivers region from July 2000 (Northern Rivers University Department of Rural Health, 2003). MERIT operates as an inter-agency program led by the NSW Department of Justice and Attorney General. Key partners include the Chief Magistrate's Office, NSW Health and NSW Police.

The scheme has developed in recognition of the fact that the prevalence of self-reported illicit drug use is higher amongst known offenders than the general population. During 2007, for example, 63 per cent of a national sample of Australian police detainees (97% of whom were aged 18+) tested positive for at least one illicit drug; cannabis was the most common drug detected (49%). This compares with 13 per cent of respondents (aged 14+) to the 2007 National Drug Strategy Household Survey who had used illicit drugs in the previous 12 months (Australian Institute of Health and Welfare, 2008). Forty-five per cent of Australian detainees attribute at least some of their offending to their drug use, while two-fifths (43%) were considered to be dependent on illicit drugs (Adams et al., 2008). Furthermore, half of all drug using suspects detained by Australian police are poly-drug users (Sweeney, 2009).

Within this context, MERIT operates as a pre-plea diversion scheme targeting adult defendants appearing in NSW Local Courts who have a demonstrable illicit drug use problem. The program aims to use drug treatment and related health and social welfare support to tackle any links that might exist between defendants' use of illicit drugs and their offending behaviour.

There is a growing body of research which demonstrates that participation in MERIT reduces rates of reconviction and re-offending (Passey et al., 2007; Lulham, 2009). MERIT has also been shown to contribute towards reductions in self-reported illicit drug use and associated risk behaviours and improvements to physical and psychological health (NSW Department of Health, 2007; Martire & Larney, 2009a). While there is good evidence to demonstrate the effectiveness of MERIT there have been fewer qualitative studies to illuminate the dynamic processes which might facilitate and sustain these behaviour changes (for an example see Passey, Flaherty & Didcott, 2006). There is some evidence to suggest MERIT is also cost-effective (Northern Rivers University Department of Rural Health, 2003). However, one in three participants fail to complete a MERIT program (Martire & Larney, 2009b) and completion rates are significantly lower for amphetamine and heroin users – who are the poorest performers across a range of health and dependency indicators on admission to treatment (ibid), women (Martire & Larney, 2009c) and Aboriginal defendants (Martire & Larney, 2009d). These are important findings since completion of a MERIT program has been found to significantly and substantially reduce the likelihood of committing any subsequent offences (Lulham, 2009). However, even upon completion of the MERIT program there is a tendency for participants to continue using illicit substances at dependent levels (Martire and Larney, 2009c).

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<sup>1</sup> MERIT was originally launched as the Early Court Intervention Pilot.  
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## 1.2 Program eligibility criteria

The eligibility criteria for the MERIT program seek to ensure the proactive targeting of a large proportion of drug-using defendants appearing before the NSW Local Courts. Whilst presenting with a demonstrable drug dependency is not a prerequisite for consideration by the program, defendants must nevertheless be clinically assessed as having an illicit drug problem of sufficient seriousness to warrant the intensive intervention offered through MERIT.

MERIT is a voluntary drug diversion scheme where both referral and treatment occur prior to the defendant making a plea of guilty or not guilty for the relevant offence(s). Involvement in MERIT may be made a condition of bail and progress is taken into consideration upon sentencing. Defendants are eligible for MERIT if they:

- are over the age of 18 years;
- are suitable for release on bail;
- live within the program catchment area;
- have a demonstrable illicit drug problem (excluding alcohol as primary substance<sup>2</sup>);
- have no current or pending matters for violent, sexual or other indictable offences;
- are deemed by a MERIT team health professional to be suitable for drug treatment;
- are approved to participate in the program by the Magistrate; and
- are willing to consent to a drug treatment program.

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<sup>2</sup> In 2008, MERIT teams covering the Wilcannia and Broken Hill Local Courts were permitted to accept defendants citing alcohol as their principal drug of concern. The Rural Alcohol Diversion (RAD) program also operated from Orange and Bathurst Local Courts, and the Wellington Options program from Wellington Local Court. Both these programs included defendants with primary alcohol issues.

## 2. HOW MERIT OPERATES AND THE SCOPE OF ITS COVERAGE

### 2.1 The MERIT process

Once charged, defendants are typically referred to MERIT at or before their initial court appearance. In order to ensure harmony with existing NSW Local Court processes - where matters are expected to progress from initial hearing to sentencing within a three-month period - MERIT program completion is scheduled to coincide with the final hearing and sentencing date set for the defendant. Figure 2.1 illustrates this process from charge and referral through to final hearing and sentencing.

Dedicated health teams assigned to participating NSW Local Courts (comprising staff from Area Health Services and/or non-governmental organisations) will undertake an assessment of need following a referral to MERIT. These comprehensive assessments cover a broad range of areas including: substance use history, behaviours and problems; physical and mental health problems; and housing, education, training and employment issues.

Once assessed as suitable and accepted onto the program an individually tailored treatment plan is drawn up for each defendant. This seeks to match participants to a range of appropriate and available drug treatments (e.g. detoxification, counselling, pharmacotherapy, residential rehabilitation, community outpatient services and case management) and related health and social welfare services (e.g. mental health, unemployment, housing and legal advice), as required.

As a voluntary pre-plea diversion scheme defendants can opt not to engage with the program, or withdraw from it at any time, electing instead to have the Magistrate determine their case through the usual court process and without prejudice.

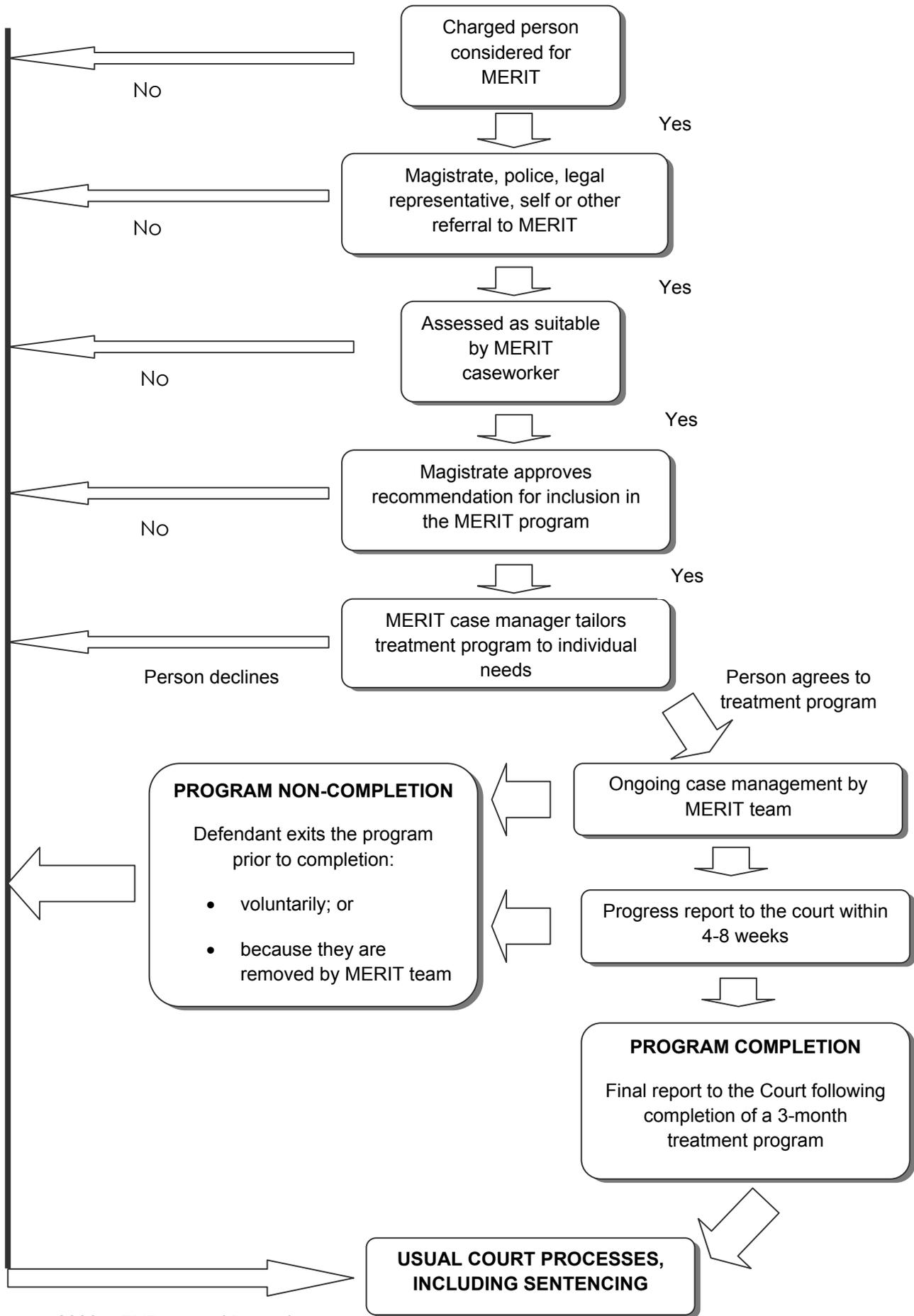
In the event that engagement with MERIT is deemed unsatisfactory or there is evidence of non-compliance (e.g. further offences or failing to appear for appointments/Court), the Magistrate reserves the right to remove defendants from the program.

In addition to the NSW Bail Act (1978), which provides the legal framework under which program operates, the MERIT Local Court Practice Note 5/2002 is also instrumental in guiding Magistrates in their dealings with those defendants engaging with the program. Point 13.1 of the Practice Note states that:

*“On sentence, the successful completion of the MERIT program is a matter of some weight to be taken into account in the defendant’s favour. At the same time, as the MERIT program is a voluntary opt in program, its unsuccessful completion should not, on sentence, attract any additional penalty.”*

In order to inform sentencing decisions, MERIT teams provide each Magistrate with a review report providing information on the nature and extent of the defendant’s participation in the program and detailing any final recommendations with regards to ongoing treatment needs. However, how the Magistrate uses the information contained within the report and assesses the impact of engagement with MERIT at sentencing is ultimately a matter for his or her discretion.

Figure 2.1: The MERIT process (Martire and Larney, 2009a: 8)



## **2.2 The scope of MERIT's coverage**

Information about MERIT's coverage by Area Health Service, MERIT Team and NSW Local Court, as at 31 December 2008, is provided in Table 2.1. As was the case with the previous Annual Report, Courts have been grouped here according to their geographic location and linked to the relevant Area Health Service. There were no additional courts in NSW offering MERIT provision during 2008 compared to 2007.

In terms of the total charge population in 2008, the MERIT program was potentially available to 80 per cent of finalised cases appearing before the NSW Local Court during this period (down from 84% of cases in 2007).

**Table 2.1: MERIT coverage by Area Health Service and NSW Local Courts (as at 31 December 2008)**

Area Health Service	MERIT teams	Courts contained within AHS boundaries <i>Courts with MERIT appear in bold</i>	Court Coverage <sup>3</sup>
South Eastern Sydney and Illawarra	South East Sydney Illawarra	<b>Wollongong, Albion Park, Kiama, Port Kembla, Nowra, Sutherland, Kogarah, Downing Centre, Central<sup>4*</sup>, Waverley, Milton</b>	100%
Sydney South West	South West Sydney Central Sydney	<b>Liverpool, Campbelltown, Camden, Burwood, Fairfield, Bankstown, Newtown, Picton, Balmain</b>	96.2%
Sydney West	Western Sydney Wentworth	<b>Parramatta, Katoomba, Penrith, Blacktown, Mt Druitt, Windsor</b>	94.2%
Hunter and New England	Hunter New England	<b>Tamworth, Cessnock, Muswellbrook, Newcastle, Maitland, Raymond Terrace, Toronto, Singleton, Belmont, Kurri Kurri, Scone, Dungog, Armidale, Glen Innes, Gunnedah, Inverell, Moree, Narrabri, Quirindi, Walcha, Wee Waa, Boggabilla, Tenterfield, Mungindi, Warialda,</b>	73.6%
Greater Western	Mid West Far West Macquarie	<b>Bathurst, Orange, Dubbo, Parkes, Oberon, Blayney, Forbes, Wilcannia, Broken Hill, Wellington<sup>5**</sup>, Condobolin, Cowra, Dunedoo, Grenfell, Lithgow, Rylstone, Peak Hill, Lake Cargelligo, Bourke, Brewarrina, Walgett, Warren, Nyngan, Lightning Ridge, Wentworth, Narromine, Guldong, Gilgandra, Coonamble, Coonabarabran, Cobar, Mudgee, Balranald</b>	56.1%
North Coast	Mid North Coast Northern Rivers	<b>Lismore, Byron Bay, Ballina, Casino, Kyogle, Port Macquarie, Kempsey, Wauchope, Mullumbimby, Murwillumbah, Tweed Heads, Grafton, Maclean, Coffs Harbour, Forster, Macksville, Taree, Bellingen, Gloucester</b>	69.9%
Greater Southern	Southern Greater Murray	<b>Queanbeyan, Wagga Wagga, Junee, Cooma, Albury, Cootamundra, Corowa, Deniliquin, Finley, Moama, Tumut, Hay, Temora, Tumbarumba, Lockhart, Moulamein, Griffith, Gundagai, Hillston, Holbrook, Leeton, Narrandera, West Wyalong, Batemans Bay, Bega, Narooma, Bombala, Eden, Crookwell, Yass, Goulburn, Moruya, Young</b>	24.9%
Northern Sydney and Central Coast	Northern Sydney Central Coast	<b>Gosford, Manly, Wyong, North Sydney, Hornsby, Ryde, Woy Woy</b>	85.9%

<sup>3</sup> As with previous Annual Reports, courts have been grouped here according to AHS. Similarly, the percentage in the 'Court Coverage' column represents the volume of finalised cases in MERIT local courts as a proportion of finalised cases in all NSW local courts, by AHS. These figures were calculated using 2008 court statistics supplied by BoCSAR.

<sup>4</sup> The Central Court registry works in conjunction with the Downing Centre.

<sup>5</sup> Although the Wellington Local Court has a MERIT-like diversion program in operation, for the purposes of this Annual Report this court's activity is not considered with other MERIT court statistics.

### **3. RESEARCH OBJECTIVES AND METHODS**

#### **3.1 The report's aim**

The main aim of this independent report by the National Drug and Alcohol Research Centre (NDARC), University of New South Wales (UNSW), was to provide the NSW Department of Justice and Attorney General with information regarding the uptake and efficacy of the MERIT program during 2008.

A key consideration when producing this document was to ensure consistency with the approach adopted during the reporting of preceding Annual Reports; thus aiding an accurate assessment of current performance against previous years' activity and key trends over the life of the program.

#### **3.2 Research methods**

This Annual Report has been informed using existing administrative data collated from two sources: the MERIT Information Management System (MIMS) and the NSW Bureau of Crime Statistics and Research (BoCSAR) Re-Offending Database (ROD).

##### **3.2.1 MERIT operational data**

MIMS was developed with the explicit intention of facilitating the ongoing monitoring and evaluation of the MERIT program. In addition to National Minimum Dataset (NMDS) items, MIMS also records a range of information pertaining to the demographic profile of participants, their relevant court dates, program entry and exit dates, and the types of intervention received as part of the program.

MIMS is also used to routinely collate assessment data of consenting participants<sup>6</sup> relating to self-reported patterns of substance use, related risk behaviours, psychological distress and physical, social and emotional functioning. Assessment data collated on the self-reported health status of defendants at entry to and exit from the program is also recorded on MIMS.

MIMS is subject to frequent internal quality assurance processes. Furthermore, quarterly data quality reports are produced for each Area Health Service in order to cross-reference and ensure both the reliability and accuracy of the data submitted by individual MERIT teams.

The nature of the MIMS dataset does however introduce a number of inherent limitations to the data presented in this report: it is reliant upon defendants' self-reporting of their behaviour; and, like any large-scale administrative dataset, MIMS invariably suffers from a degree of missing data.

Program exit data relating to substance use and health outcomes are also biased towards program completers. These data tend to be restricted to this group for a range of reasons: non-completers fail to re-engage with MERIT after breaching, being removed or withdrawing from the program; they may be detained in custody for further offences; or they might leave the program shortly after entering it. Given the differences between program completers and non-completers (described in more detail in Chapter 7) the outcomes reported here should not be considered representative of all program participants.

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<sup>6</sup> Participants accessing the MERIT program provide their informed consent for the (appropriately anonymised) information provided to the MERIT team during the course of the assessment process to be used in order to facilitate research and evaluation by the MERIT program.

### **3.2.2 Criminal justice data**

BoCSAR provided NDARC with anonymised and aggregated data on sentence outcomes and re-convictions for defendants referred to the MERIT program. Information regarding the court appearances and convictions of MERIT participants were sought by MERIT from BoCSAR on behalf of NDARC.

As with previous Annual Reports, sentence outcome data were assembled by matching MERIT referral information to sentence outcomes on the Local Court database (GLC). For the 2008 Annual Report 86.8 per cent of relevant MERIT defendants had sentence outcome information available having been successfully matched against the GLC. This is higher than the match rate during 2007.

Re-conviction rates were calculated by matching a defendant's Criminal Name Index (CNI) number and date of birth to BoCSAR's Re-Offending Database (ROD). For the 2008 Annual Report 94.8 per cent of cases were successfully matched to the ROD.

### **3.2.3 Base-line data**

In line with the approach adopted for previous reports we have employed two baseline reference points. The baseline for considering MERIT inputs (referrals and acceptances) and outputs (completion rates) was 1 January to 31 December 2008 inclusive. This reflects the MERIT program's activity for that calendar year.

By contrast, sentence outcome and reconviction data are presented for the cohort of MERIT defendants exiting the program during the previous calendar year (i.e. 2007). Measuring program outcomes in this way is necessary to allow for a sufficient period of time to have elapsed in order to measure reconviction outcomes.

### **3.2.4 Data analysis**

All data were subject to analysis using SPSS (the Statistical Package for the Social Sciences). Descriptive statistics were used to profile the characteristics of the MERIT cohort during 2008. Missing data are recorded where appropriate in order to aid interpretation of results. All percentages have been calculated with missing data excluded.

Levels of association between binary dependent and independent variables were tested using Pearson correlations (chi-square tests). The Wilcoxon signed-rank test was used to assess the significance of changes in continuous variables (e.g. number of days of substance use) involving the same defendants at entry to and exit from MERIT.

Finally, in an attempt to disentangle any inter-relationships between defendant characteristics and MERIT team, for instance, and thus identify those factors most predictive of completing a MERIT program, linear logistic regression models were developed and tested.

#### 4. MERIT PROGRAM ACTIVITY IN 2008

This chapter provides a descriptive overview of MERIT program activity during the 2008 calendar year.

##### 4.1 MERIT referral and acceptance rates

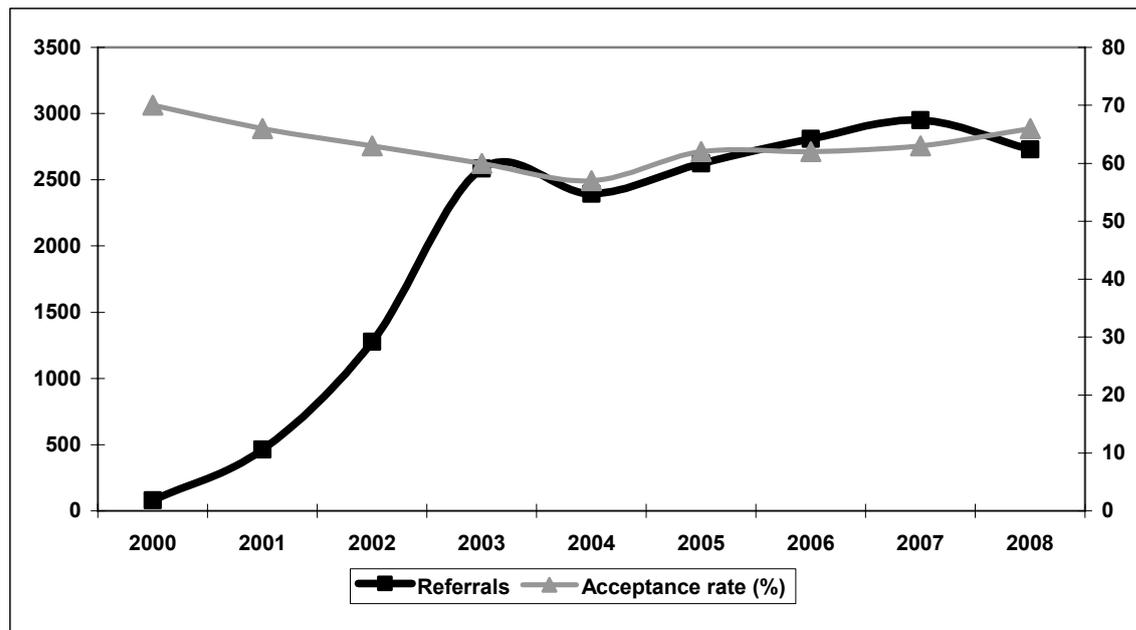
###### 4.1.1 Number of MERIT referrals

Between 1 January and 31 December 2008 there were 2,731 referrals to the program; a 7 per cent reduction (of 218 referrals) on the previous year. This is only the second year-on-year fall in referrals since MERIT became operational in 2000 (the last drop in activity having occurred in 2004). With the exception of a family member/friend and Magistrates, the number of referrals to MERIT from all remaining referral sources fell between 2007 and 2008.

###### 4.1.2 MERIT acceptance rates

Of the 2,731 referrals in 2008, two-thirds (n=1,810) were accepted onto the program. Figure 4.1 charts referral and acceptance rates over time. Whilst there has been a consistent overall growth in referrals to MERIT since 2000, acceptance rates fell by 13 percentage points up to 2004, but have increased by six percentage points since then.

Figure 4.1: MERIT referrals and percentage acceptance rates (2000-2008) (N=17,913)



One in three referred defendants (n=921) did not access the MERIT intervention during 2008; 113 (4%) failed to attend for an assessment (referral only) and 72 (3%) declined an offer to attend the program before a treatment protocol had been devised. When compared to the previous year's activity, the proportion of referrals not attending for assessment and declining to participate had reduced slightly (by 1 percentage point).

###### 4.1.3 Non-acceptance by the MERIT program

Just over one quarter (n=734; 27%) of those referred to MERIT during this period were not accepted to participate in the program – a rate consistent with 2007 activity (27%). As illustrated in Table 4.2, the most common reasons for non-acceptance included having no demonstrable drug problem, being unwilling to participate and not being eligible for bail.

**Table 4.2: Reasons for non-acceptance of MERIT program referrals (2008) (n=734)**

Reason for non-acceptance		2008	
		n	%
Not eligible	No demonstrable drug problem	200	27.2
	Not eligible for bail	113	15.4
	Strictly indictable offence(s)	54	7.4
	Not an adult	1	0.1
	<b>Sub total</b>	<b>368</b>	<b>50.1</b>
Not suitable	Unwilling to participate	173	23.6
	Mental health problem	7	1.0
	Already in court ordered treatment	5	0.7
	<b>Sub-total</b>	<b>185</b>	<b>25.3</b>
Program logistics	Resides outside of effective treatment area	9	1.2
	Program full	17	2.3
	<b>Sub-total</b>	<b>26</b>	<b>3.5</b>
Program entry not endorsed by Magistrate	<b>Sub-total</b>	<b>77</b>	<b>10.5</b>
Other	<b>Sub-total</b>	<b>78</b>	<b>10.6</b>
<b>TOTAL</b>		<b>734</b>	<b>100</b>

Compared to the previous year, there was an increase in the proportion of MERIT referrals with no demonstrable drug problem (from 23.1% in 2007), but a reduction in the proportion of defendants not eligible for bail (from 19.9%) and unwilling to participate (from 27.4%).

## 4.2 MERIT referral

### 4.2.1 MERIT referral sources and acceptance rates

Solicitors and Magistrates accounted for 75 per cent of the referrals to MERIT during 2008 (Table 4.3). As noted above, Magistrates and family/friends were the only two referral sources to MERIT which measured proportional increases between 2007 and 2008.

**Table 4.3: Sources of referral and acceptance rates (2008)**

Referral source	Referrals by source		Acceptances by source	
	n	%	n	%
Solicitor	1,169	43.0	788	67.4
Magistrate	879	32.3	649	73.8
Self	252	9.3	166	65.9
Other <sup>7</sup>	213	7.8	102	47.9
Police	120	4.4	59	49.2
Probation and Parole	46	1.7	30	65.2
Family /friend	41	1.5	16	39.0
<b>TOTAL</b>	<b>2,720*</b>	<b>100</b>	<b>1,810</b>	

\* Data on referral source were missing in 11 cases

Those referred to the program by Magistrates<sup>8</sup> during 2008 were significantly more likely to be accepted by MERIT than those referred from other sources. Referrals from the police<sup>9</sup>, family/friends<sup>10</sup> and 'other'<sup>11</sup> sources were the least likely groups to be subsequently accepted onto the program during this period.

### 4.2.2 Previous referrals to MERIT

Given the chronic, relapsing nature of drug dependency, a previous referral to MERIT will not render a defendant ineligible for a subsequent referral at a later date. It is also possible, for the reasons described in Table 4.2, above, that a defendant might not have been accepted or completed the program following an earlier referral.

One in five (n=569; 21%) referred defendants during 2008 had previously been referred to MERIT – a rate identical to 2007 (n=625; 21%).

<sup>7</sup> As noted in earlier Annual Reports (e.g. Martire and Lamey, 2009: 14), 'Other' MERIT referrals are typically made by health care professionals.

<sup>8</sup>  $\chi^2=30.9$ ,  $df=1$ ,  $p=0.000$ .

<sup>9</sup>  $\chi^2=17.0$ ,  $df=1$ ,  $p=0.000$ .

<sup>10</sup>  $\chi^2=14.1$ ,  $df=1$ ,  $p=0.000$ .

<sup>11</sup>  $\chi^2=36.1$ ,  $df=1$ ,  $p=0.000$ .

However, consistent with the trend in earlier years, there were no significant differences in the likelihood of being accepted onto the program in 2008 between defendants who had previously been referred to MERIT and those not.

**Table 4.4: Program status by number of referrals to MERIT (2008)**

Extent of past contact with MERIT	Program status								
	Accepted		Declined		Not accepted		Referral only		Total
	n	%	n	%	n	%	n	%	n
No previous referrals	1,423	66.0	62	2.9	583	27.0	91	4.2	2,159
1 previous referral	298	69.8	8	1.9	106	24.8	15	3.5	427
2+ previous referrals	88	62.0	2	1.4	45	31.7	7	4.9	142
<b>Total</b>	<b>1,809</b>	<b>66.3</b>	<b>72</b>	<b>2.6</b>	<b>734</b>	<b>26.9</b>	<b>113</b>	<b>4.1</b>	<b>2,728</b>

### 4.3 The demographic profile of referred/accepted defendants

#### 4.3.1 Gender

In line with activity during recent years, around one in five referrals (n=552; 20.5%) and acceptances (n=398; 22%) to the MERIT program during 2008 were female<sup>12</sup>. However, for the first time women (72%) were significantly more likely to be accepted onto the program than males (66%)<sup>13</sup>.

The gender ratio of defendants referred to MERIT during this period is consistent with that for those found guilty following an appearance before all NSW Local Courts in 2008 (NSW Bureau of Crime Statistics and Research, 2009: 5).

#### 4.3.2 Age

Defendants referred to the program during 2008 ranged in age from 16 to 69 years<sup>14</sup>. The average (median) age of those both referred and accepted was 29 (up from 28 years in the previous year). As was the case during 2007, the largest proportion of referred defendants in 2008 were aged between 25-29 years, accounting for just under one in four referrals (24%). This was followed by the 30-34 (18%) and 21-24 (17%) age group. As shown in Table 4.5, collectively, these groups accounted for around three-fifths (58%) of all referrals to the program during this period. This age distribution is broadly consistent with the pattern followed throughout the lifetime of MERIT.

<sup>12</sup> Data on gender were missing in 33 cases.

<sup>13</sup>  $\chi^2=7.9$ ,  $df=1$ ,  $p=0.005$

<sup>14</sup> Due to missing data age at referral could not be calculated for nine cases.

**Table 4.5: Age at referral and acceptance as a proportion of referrals (2008)**

Age group	Referred		Accepted	
	n	% of all referrals	n	% of age group
17 or under	4	0.1	2	50.0
18-20	363	13.3	231	63.6
21-24	458	16.8	295	64.4
25-29	645	23.7	444	68.8
30-34	481	17.7	314	65.3
35-39	344	12.6	231	67.2
40-49	343	12.6	238	69.4
50+	84	3.1	55	65.5
<b>Total</b>	<b>2,722</b>	<b>100</b>	<b>1,810</b>	

#### 4.3.3 Indigenous status

As illustrated in Table 4.6, 18 per cent (n=453) of referrals to MERIT during 2008 identified as Aboriginal or as a Torres Strait Islander<sup>15</sup>. This is an increase from 2007 (16.1%) and the highest proportion of referrals identifying as such since the program commenced in 2000<sup>16</sup>. This figure is also higher than the proportion of Indigenous defendants who appeared before all Local Courts in 2008 (13.6%) (ibid: 22).

However, a significantly lower proportion of Indigenous defendants were *accepted* into MERIT during 2008: 66.4 per cent compared with 72.3 per cent for non-Indigenous defendants<sup>17</sup>. The only significant difference observed in the *reasons* given for non-acceptance based on Indigenous status during 2008, were that indigenous defendants were significantly more likely to be unwilling to participate in the program (8.8%) than others (6.0%)<sup>18</sup>.

<sup>15</sup> Data on indigenous status were missing (n=158) or not stated (n=66) in 8.2 per cent of cases.

<sup>16</sup> Eighteen per cent of referred cases in 2003 also identified as Aboriginal or as a Torres Strait Islander.

<sup>17</sup>  $\chi^2 = 6.2$ ,  $df=1$ ,  $p=0.013$

<sup>18</sup>  $\chi^2 = 4.7$ ,  $df=1$ ,  $p=0.030$

**Table 4.6: Indigenous status of referred defendants and acceptances as a proportion of referrals (2008)**

Indigenous status	Referred		Accepted	
	n	%	n	% of referrals
Indigenous*	453	18.1	301	66.4
Non-indigenous	2,054	81.9	1,485	72.3
<b>Total</b>	<b>2,507</b>	<b>100</b>	<b>1,786</b>	

\*Includes those identifying as Aboriginal (n=431), Torres Strait Islander (n=11) or Aboriginal and Torres Strait Islander (n=11).

#### 4.3.4 Country of birth

The majority of those referred to the MERIT program during 2008 were born in Australia (89.3%)<sup>19</sup>. This is consistent with figures for 2007 (88.0%)<sup>20</sup>. The most common countries of origin for defendants born outside Australia in 2008 were New Zealand (n=60), Vietnam (n=39) and the United Kingdom (n=25).

#### 4.3.5 Educational attainment

As has been the case throughout the life of the MERIT program, the majority of referred defendants in 2008 were those for whom the highest level of educational attainment was equivalent to Year 10 or less (72.4%; from 74.4% in 2007)<sup>21</sup>. Fewer than one in five (n=333; 17.7%) were educated to the level of Year 11 or 12; seven per cent (n=140) had trade or TAFE qualifications and only a small proportion (2.4%; n=45) were tertiary-level educated.

#### 4.4 Principal drug of concern

Information relating to the principal drug of concern to be addressed by the MERIT program is provided in Table 4.7. Cannabis was the principal drug of concern for nearly half (n=843; 46.6%) of all accepted defendants during 2008. As indicated in Figure 4.2, this is more than twice the proportion of cannabis users dealt with in 2000 (21.8%) and an increase from 2007 (41.8%).

Stimulant users accounted for over one in four cases accepted in 2008 (n=504; 27.8%) and narcotic drugs represented one-fifth of the caseload (n=373; 20.6%). Heroin was the principal drug of concern (n=337) for most narcotic using defendants. However, this is the lowest proportion of principal heroin users accepted onto MERIT (18.6%) since the program began in 2000. This is nevertheless consistent with the 17 per cent of drug using arrestees who tested positive for heroin as part of the Drug Use Monitoring in Australia (DUMA) program in 2008. According to these DUMA data, the proportion of Australian arrestees in four sites (including NSW) testing positive for heroin has fallen consistently since 2000, at which point 37 per cent of arrestees testing positive for illicit drugs were identified as heroin users.

The number of different drugs used problematically by accepted defendants in 2008 ranged from one to nine, with an average (median) of two.

<sup>19</sup> Data on country of birth were missing in 163 cases relating to 2008 activity.

<sup>20</sup> Country of birth information was missing for 213 referrals in 2007.

<sup>21</sup> Data on educational attainment were missing in 851 (31.2%) cases in 2008.

Figure 4.2: Trends in principal drug of concern addressed by MERIT (2000-2008) (N=11,111)

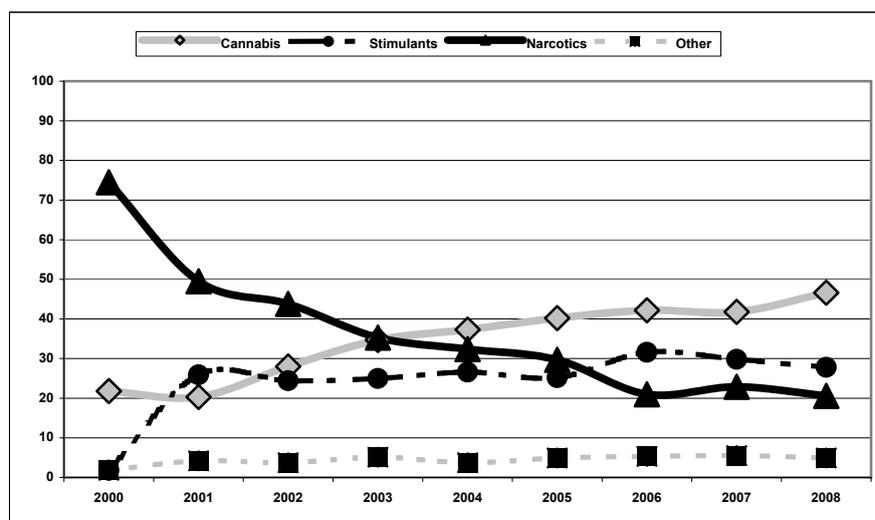


Table 4.7: Principal drug of concern for accepted MERIT defendants (2008)

Principal drug of concern		n	%
Cannabis		<b>843</b>	<b>46.6</b>
Stimulants	Amphetamines/Methamphetamines (inc. Speed, Ice)	444	24.5
	Cocaine	37	2.0
	MDMA (ecstasy)	22	1.2
	Other	1	0.1
	<b>Sub-total</b>	<b>504</b>	<b>27.8</b>
Narcotics	Heroin	337	18.6
	Methadone	13	0.7
	Morphine (inc. MS Contin, Opium)	21	1.2
	Buprenorphine	1	0.1
	Other	1	0.1
	<b>Sub-total</b>	<b>373</b>	<b>20.7</b>
Sedatives/anaesthetics	Benzodiazepines	58	3.2
	Gamma-hydroxybutyrate (GHB)	3	0.2
	Other	3	0.2
	<b>Sub-total</b>	<b>64</b>	<b>3.6</b>
Alcohol <sup>22</sup>		<b>24</b>	<b>1.3</b>
Other		2	0.1
<b>TOTAL</b>		<b>1,810</b>	<b>100</b>

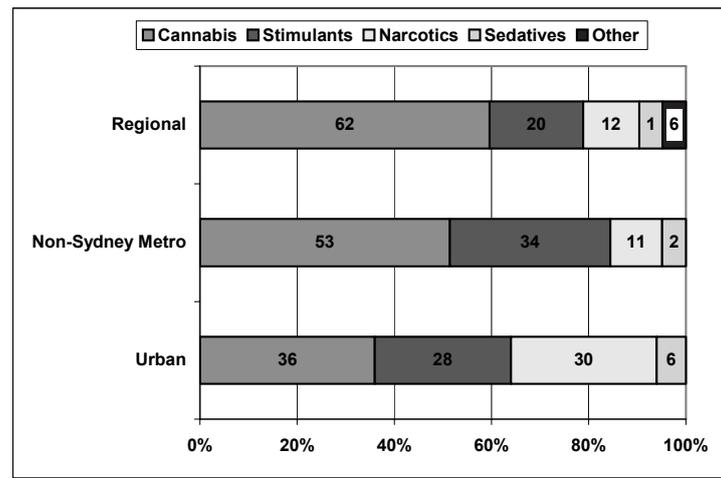
<sup>22</sup> MERIT teams covering the Wilcannia and Broken Hill Local Courts are permitted to accept referrals of defendants citing alcohol as their principal drug of concern. The Rural Alcohol Diversion (RAD) program also operates from Orange and Bathurst Local Courts.

#### 4.4.1 Principal drug of concern by region<sup>23</sup>

Important differences have emerged over the life of the MERIT program in relation to the main principal drug of concern on the basis of NSW region. For example, between 2000 and 2007 cannabis was the main drug of concern for half (50.3%; n=1,334) of all regionally based accepted defendants, compared with 30 per cent of urban defendants. By contrast, the proportion of urban defendants accepted onto MERIT during this period reporting narcotics as their principal drug of concern (40.2%; n=1,585) was twice the rate for regional defendants (n=529; 19.9%).

The principal drugs of concern for persons accepted by MERIT in 2008 are set out in Figure 4.3. As illustrated in Table 4.8, these patterns have remained stable compared with 2007.

**Figure 4.3: Principal drug of concern for accepted defendants, by region (2008)**



**Table 4.8: Principal drug of concern for accepted defendants, by region (2007 and 2008)**

Principal drug of concern	2007			2008		
	Urban	Non-Sydney Metro	Regional	Urban	Non-Sydney Metro	Regional
Cannabis	33.0	46.0	57.8	35.7	52.8	61.6
Stimulants	29.1	37.0	23.2	28.3	33.8	19.7
Narcotics	32.6	9.3	9.3	30.3	11.0	12.1
Other	5.4	2.1	9.8	5.7	2.4	6.6
<b>n</b>	<b>983</b>	<b>476</b>	<b>410</b>	<b>879</b>	<b>509</b>	<b>422</b>

<sup>23</sup> In keeping with the approach adopted in previous MERIT Annual Reports (Martire & Larney, 2009: 18), the Urban region comprises the Northern Sydney, Western Sydney, South Eastern Sydney, South Western Sydney, Central Sydney and Wentworth MERIT teams. The Non-Sydney Metro region consists of the Hunter, Illawarra and Central Coast MERIT teams. The Regional region is made up of the New England, Mid West, Far West, Macquarie, Mid North Coast, Northern Rivers, Southern and Greater Murray MERIT teams.

## 4.5 Number of charges and type of offence

### 4.5.1 Number of charges

There were a total of 3,884 charges against 2,483 defendants referred to MERIT during 2008, ranging from one to six separate charges per defendant. The average (median) number of charges was one. The number of charges against a defendant had no bearing on the likelihood of being accepted onto the program in 2008.

### 4.5.2 Type of offence and previous custodial experience

Table 4.9 sets out the nature and extent of the offences for which those referred and accepted into the MERIT program during 2008 were awaiting sentence. As alluded to above, 40 per cent (n=999) of defendants had two or more outstanding charges at the point of referral<sup>24</sup>.

Illicit drug offences and theft and related offences were the most common charges faced by MERIT defendants - for both those referred to and accepted by the program in 2008. More than three-fifths of the participants at each of these two stages of the MERIT process had pending charges relating to these offences. Amongst those accepted onto the program in 2008, those assessed as having cannabis as their principal drug of concern comprised the largest group charged with illicit drug offences (59%; n=394). By contrast, users of narcotics were the group most likely to be charged with theft and related offences (40%; n=197).

Just under half those referred (n=694; 48.3%) and accepted (n=599; 47.5%) onto the MERIT program in 2008 had previously served a custodial sentence<sup>25</sup>. Those engaging with MERIT for support principally around their use of cannabis were significantly less likely to report having previously been imprisoned (35.4%) than others (58.3%) accepted during this period<sup>26</sup>.

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<sup>24</sup> The offences considered have been structured according to the Australian Bureau of Statistics' Australian Standard Offence Classification (ASOC) system.

<sup>25</sup> Information on previous experience of prison was missing in 1,296 cases.

<sup>26</sup>  $\chi^2 = 66.2$ ,  $df=1$ ,  $p=0.000$

**Table 4.9: Offence types for referred and accepted MERIT defendants (2008)**

Offence type	Referred (n=2,483) <sup>27</sup>		Accepted (n=1,810)	
	n	% of defendants	n	% of defendants
Acts intended to cause injury	406	16.4	271	15.0
Against justice procedures, government security/operations	400	16.1	276	15.2
Dangerous or negligent acts endangering persons	179	7.2	115	6.4
Deception and related offences	60	2.4	45	2.5
Illicit drug offences	906	36.5	670	37.0
Miscellaneous offences	200	8.1	158	8.7
Property damage and environmental pollution	233	9.4	167	9.2
Public order offences	86	3.5	58	3.2
Road traffic and motor vehicle regulatory offences	386	15.5	308	17.0
Robbery, extortion and related offences	56	2.3	35	1.9
Sexual assault and related offences	2	0.1	0	0
Theft and related offences	683	27.5	499	27.6
Unlawful entry with intent/burglary, break and entry	175	7.0	121	6.7
Weapons and explosives offences	112	4.5	84	4.6

<sup>27</sup> Data on charging offence were missing in 248 cases.  
2008 MERIT Annual Report

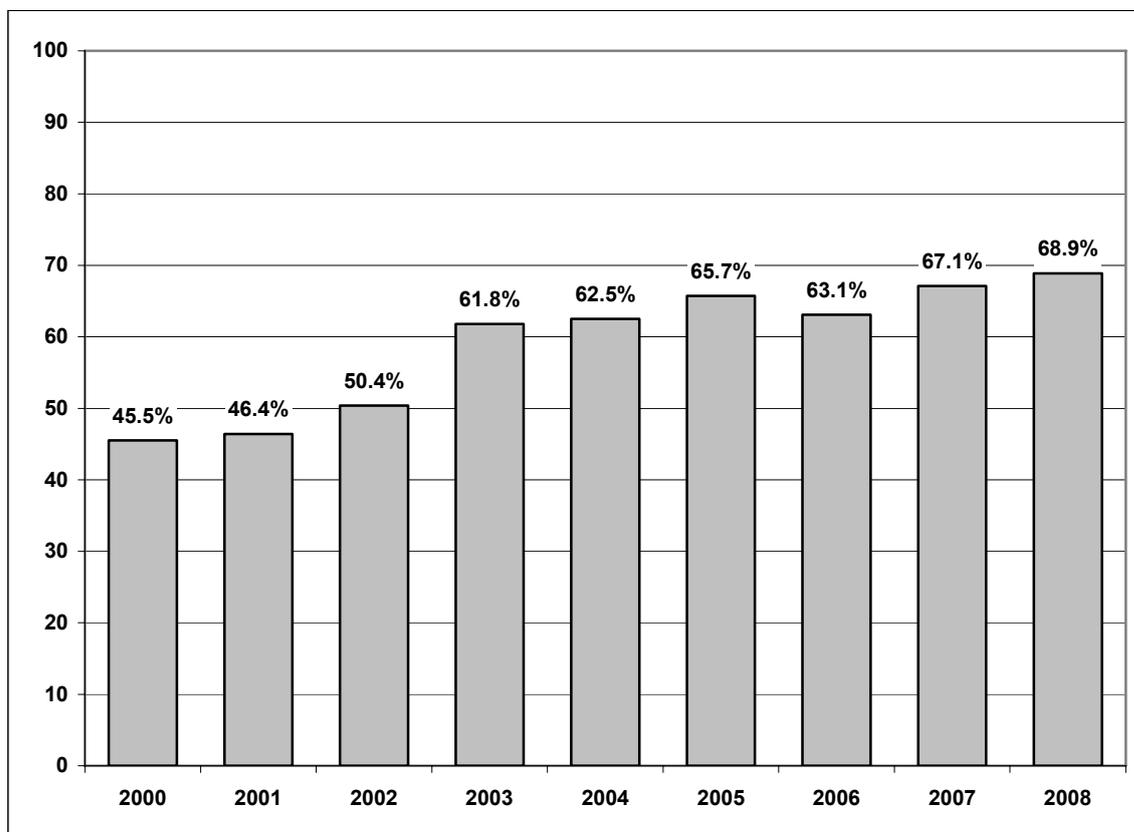
## 5. MERIT PROGRAM EXITS

This chapter considers the 1,857 defendants who were accepted into MERIT and subsequently exited the program at some point during 2008. Just over one in four of these participants (n=505; 27.2%) had accessed the program during 2007. The remainder engaged with MERIT during 2008 (n=1,352). This cohort includes defendants who completed program requirements (completers), as well as those not completing requirements (non-completers).

### 5.1 Exit status of defendants accepted into MERIT

Sixty-nine per cent of MERIT participants exited the program during 2008 having met all program requirements. As illustrated in Figure 5.1, this is the highest rate of completion recorded for accepted participants throughout the life of the MERIT program.

**Figure 5.1: MERIT program completion rates for accepted defendants (2000-2008) (N=10,654)**



The remaining participants who exited MERIT during 2008 did not complete the program for a range of reasons. As indicated in Table 5.1, these included being breached by MERIT, withdrawing from the program voluntarily or being removed by the court. Compared to 2007, there was an increase in the proportion of participants removed by the court. However, the rate at which defendants were breached by the MERIT team for non-compliance with program requirements was lower in 2008 than at any point since the start of the program in 2000.

**Table 5.1 Status of participants exiting the MERIT program (2007 and 2008) (n=1,857)**

Exit status	2007		2008	
	n	%	n	%
Completed program	1,222	67.1	1,279	68.9
Breached by MERIT	350	19.2	314	16.9
Withdrew voluntarily	159	8.7	161	8.7
Removed by court	71	3.9	86	4.6
Died	3	0.2	1	0.1
Other	16	0.9	16	0.9
<b>TOTAL</b>	<b>1,821</b>	<b>100</b>	<b>1,857</b>	<b>100</b>

## 5.2 Program duration

Although it is anticipated that MERIT defendants will typically be engaged with the program for a three-month period, in practice the nature and extent of this contact will vary considerably. Decision-making on this issue is very often at the discretion of the Magistrate dealing with each individual case, in consultation with the MERIT team, the defendant and his/her legal representative.

The average (median) length of time completers spent on the MERIT program<sup>28</sup> in 2008 was 90 days; inevitably leading to a significantly longer period of contact time than non-completers (49 days)<sup>29</sup>. This trend is consistent with previous Annual Reports, but both completers and non-completers in 2008 spent longer in contact with MERIT than their counterparts in 2007 (median 85 and 42 days respectively) (Martire & Larney, 2009a: 23). However, whilst completers in 2008 had more overall contact with staff during their time engaged with MERIT (mean 23 contacts) than non-completers (14 contacts)<sup>30</sup>, there were no significant differences in the average (median) rate of service access between completers (one contact every 4.9 days) and non-completers (one contact every 4.7 days) during their engagement with the program.

## 5.3 Treatments and services

This section considers both the nature and extent of previous treatment exposure of defendants prior to accessing MERIT and the range of treatment services delivered by external providers to participants as part of their contact with the program.

### 5.3.1 Treatment history prior to MERIT

Data on previous exposure to substance misuse treatment services were available for 96 per cent (n=1,789) of the 1,857 MERIT participants who exited the program in 2008. Just under one third (n=518; 31.2%) reported MERIT as their first contact with drug treatment services, a reduction on figures for 2007 (36%). Amongst those reporting having accessed specialist support prior to their contact with MERIT (n=1,209; 67.6%), the number of different types of intervention accessed range from one to six, with an average (median) of two. The main treatment modalities accessed in the past by exiting MERIT participants during 2008 are set out in Table 5.2, below.

<sup>28</sup> Calculated using program entry and exit dates.

<sup>29</sup> Mann-Whitney U = 107959.5, p=0.000

<sup>30</sup> Mann-Whitney U = 204034.0, p=0.000

**Table 5.2: Previous substance misuse treatments received by exiting MERIT participants (2008) (n=1,789)**

Previous treatment modality	n	%
Counselling	790	44.2
Pharmacotherapies	445	25.4
Withdrawal management	411	23.0
Residential rehabilitation	344	19.2
Support and case management	121	6.8
Information and education	27	1.5
Consultation (not withdrawal management)	30	1.7
Other	110	6.1

### 5.3.2 Treatment interventions received whilst on MERIT

Individual treatment plans are developed by MERIT caseworkers which are tailored to the specific needs of defendants. Deploying what might be described as a generic ‘support and case management’ approach (which was received by 98.5 per cent of exiting participants during 2008), defendants can also receive individual counselling and can be referred to a range of treatment providers for additional services as required (e.g. substitute prescribing or mental health support). However, different MERIT teams and Area Health Services will have different arrangements in place for funding and commissioning services locally. Just under half (47.8%; n=887) of the 1,857 exiting defendants in 2008 received such a referral.

Relevant information about the nature and extent of the support delivered by agencies external to the MERIT team was available for 702 (79.1%)<sup>31</sup> of the 887 exiting MERIT participants in 2008 who were referred for such support. This group accessed 1,176 separate forms of intervention from external providers during their time with the program; two-fifths (n=284) continued to access this support beyond their contact with MERIT. The number of different interventions accessed ranged from one to six with an average (median) of one. The median length of time defendants were engaged with these services was 20 days (ranging from 0 to 392 days). The most common forms of support received by these referred exiting participants during 2008 were:

- withdrawal management (34.3%; n=241);
- residential rehabilitation (33.8%; n=237);
- other interventions (e.g. mental health, education and employment support, health services) (30.9%; n=217);
- pharmacotherapies (29.9%; n=210); and
- counselling (17.0%; n=119).

<sup>31</sup> With the exception of inpatient treatments (rehabilitation and detoxification), other interventions and services provided by agencies external to the MERIT team can be poorly recorded on MIMS.  
2008 MERIT Annual Report

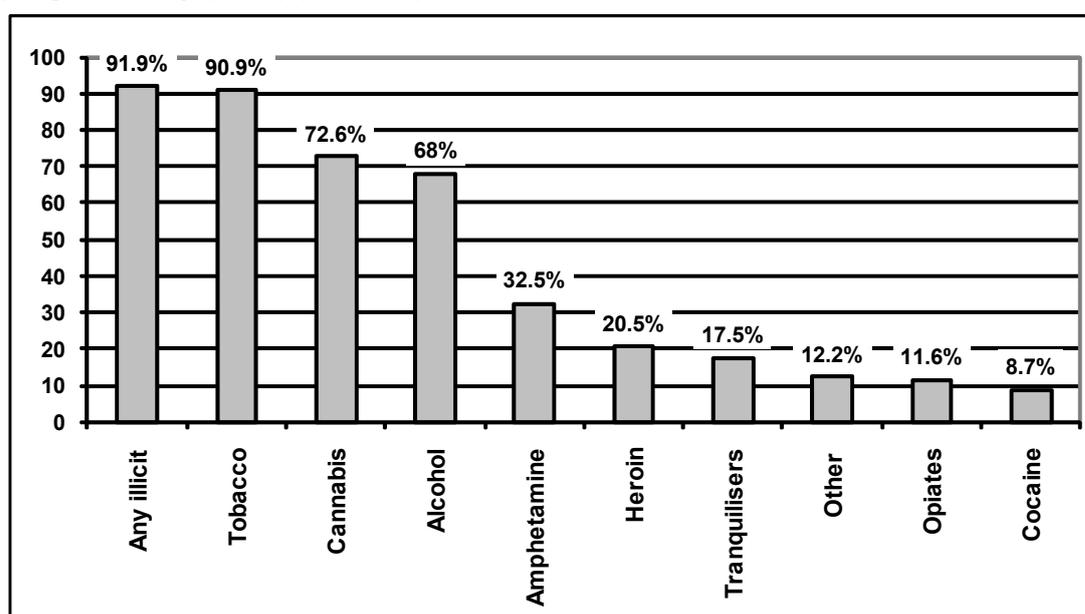
## 6. SUBSTANCE USE AND HEALTH OUTCOMES

This section provides information on the 1,810 defendants accepted by MERIT in 2008. Self-reported substance use and physical and psychological health information is collected upon entry to and exit from the MERIT program, where possible<sup>32</sup>.

### 6.1 Substance use

Nine out of ten defendants accepted by MERIT (and for whom data were available) had reportedly used an illicit<sup>33</sup> drug in the 30 days prior to program entry<sup>34</sup> (n=1,221; 91.9%). Cannabis was the most commonly used illicit substance, consumed by around three-quarters of all defendants during this period (n=963). Figure 6.1 illustrates the nature and extent of substance use among accepted defendants upon entry to the MERIT program during 2008.

Figure 6.1: The nature and extent of drug use among accepted MERIT defendants at program entry (2008) (N=1,329)



The average (mean) number of substances used by defendants was 3.3 (ranging from 0 to 8). Excluding the use of alcohol and tobacco, the average (mean) number of *illicit* substances used was 1.7 (ranging from 0 to 6). This compares with a figure of 1.9 illicit substances reported in the 2007 Annual Report (Martire & Larney, 2009a: 26). At entry to MERIT around half the defendants during 2008 reported consuming illicit drugs on 25 days out of the last 30 (mean 19.6).

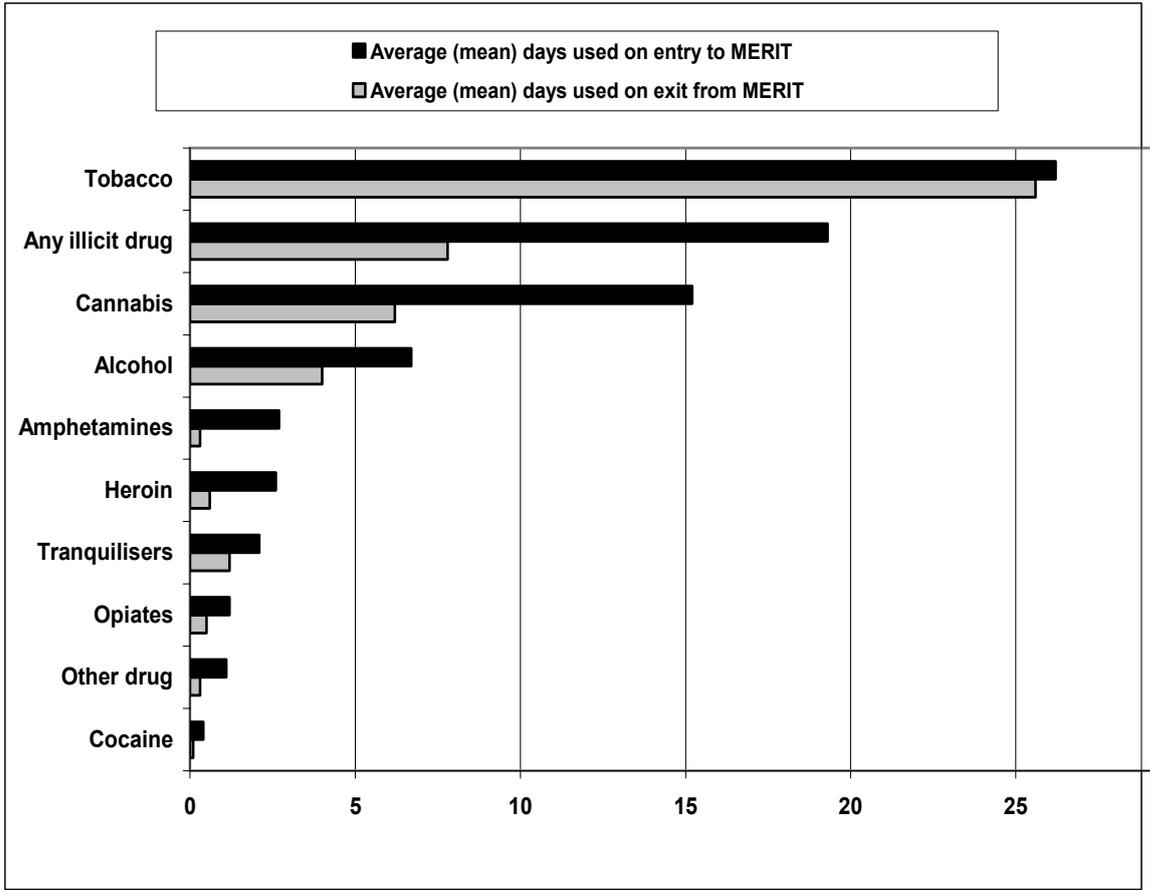
As shown in Figure 6.2, below, using data for those accepted defendants for whom substance use information was available upon entry to and exit from the program in 2008 revealed reductions in the frequency of use across all nine categories.

<sup>32</sup> For a range of different reasons (considered in more detail on page 9) exit data on substance use and health outcomes are almost exclusively restricted to program completers and should therefore not be considered representative of all program participants.

<sup>33</sup> With the exception of alcohol and tobacco, an assumption has been made that other substances (e.g. tranquilisers and opiates) were being used for non-medical purposes and were not prescribed.

<sup>34</sup> Data on drug use at entry to MERIT were missing for 481 cases.

**Figure 6.2: Average (mean) frequency of substance use upon entry to and exit from the program (2008) (n=695)**



Furthermore, the reductions in both the frequency and intensity<sup>35</sup> of self-reported substance use were statistically significant across all categories for this sub-sample of accepted MERIT participants in 2008. The largest reductions in both the frequency and intensity of reported use for individual illicit drugs were recorded for cannabis and amphetamines (as described in Table 6.1).

<sup>35</sup> An intensity score was calculated by multiplying the number of days in the month a substance was used by the units consumed per day.  
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**Table 6.1: Changes in the number of days using substances and the intensity of use in the month on entry to and exit from the MERIT program (n=695)**

Substance	N	Average (mean) days used on MERIT entry	Average (mean) days used on MERIT exit	Wilcoxon signed-rank test results	N	Average (mean) intensity score on MERIT entry	Average (mean) intensity score on MERIT exit	Wilcoxon signed-rank test results
Alcohol	694	6.7	4.0	Z=-8.45, p=0.000, r=-0.23	694	67.2	22.7	Z=-8.82, p=0.000, r=-0.24
Tobacco	695	26.2	25.6	Z=-1.97, p=0.049, r=-0.05	695	462.8	399.2	Z=-6.61, p=0.000, r=-0.18
Cannabis	693	15.2	6.2	Z=-15.36, p=0.000, r=-0.41	694	273.0	47.4	Z=-16.17, p=0.000, r=-0.43
Opiates	694	1.2	0.5	Z=-4.10, p=0.000, r=-0.11	693	10.6	3.8	Z=-3.50, p=0.000, r=-0.09
Heroin	693	2.6	0.6	Z=-8.47, p=0.000, r=-0.23	693	7.4	2.3	Z=-8.47, p=0.000, r=-0.23
Cocaine	693	0.4	0.1	Z=-4.95, p=0.000, r=-0.13	693	1.7	0.5	Z=-4.94, p=0.000, r=-0.13
Amphetamines	694	2.7	0.3	Z=-11.42, p=0.000, r=-0.31	693	12.3	1.3	Z=-11.12, p=0.000, r=-0.30
Tranquilisers	693	2.1	1.2	Z=-4.44, p=0.000, r=-0.12	692	18.0	4.7	Z=-4.70, p=0.000, r=-0.13
Other drug	636	1.1	0.3	Z=-4.92, p=0.000, r=-0.14	624	3.8	0.6	Z=-5.25, p=0.000, r=-0.15
Any illicit drug <sup>36</sup>	693	19.3	7.8	Z=-17.62, p=0.000, r=-0.47	694	299.6	56.4	Z=-17.46, p=0.000, r=-0.47

<sup>36</sup> Calculated using the maximum value for (i) the number of days in the month an illicit drug was used and (i) the maximum intensity score recorded for these seven illicit substances.

## 6.2 Severity of Dependence

The degree to which MERIT participants' substance use could be considered dependent was assessed using the Severity of Dependence Scale (SDS) (Gossop et al., 1995). As shown in Table 6.2, those seeking support from MERIT principally around their use of narcotics had higher average (mean) SDS scores than defendants using other substances. The average overall SDS score for 2008 (8.3) is consistent with the figure reported for the 2007 MERIT cohort (8.2) (Martire & Larney, 2009a: 27). However, while the average dependency score for heroin users increased between 2007 and 2008 (from 8.2 to 9.7), the SDS score for cannabis users fell slightly (from 8.1 to 7.9) (ibid).

**Table 6.2: Average (mean) Severity of Dependence Scale scores for accepted defendants during 2008 (n=1,323)**

Principal substance	2008	
	N	Mean (SD) <sup>37</sup>
Narcotics	263	9.6 (3.0)
Sedatives	42	8.8 (3.4)
Stimulants	372	8.0 (3.5)
Cannabis	624	7.9 (3.4)
Other	2	6.0 (0)
Alcohol	20	5.6 (3.7)
Total	1,323 <sup>38</sup>	8.3 (3.4)

Those accepted MERIT defendants for whom SDS data were available both on entry to the program in 2008 and upon exit (n=687) recorded a 34 per cent reduction in overall dependency scores. As illustrated in Table 6.3, these statistically significant medium effect sized reductions<sup>39</sup> in SDS scores were also apparent for all types of principal problem substance.

<sup>37</sup> SD=standard deviation.

<sup>38</sup> SDS scores are missing for 487 cases on entry to MERIT.

<sup>39</sup> R values below 0.5 denote medium or small effect sizes.

**Table 6.3: Changes in average (mean) Severity of Dependence Scale (SDS) score upon entry to and exit from the MERIT program, by principal drug (n=687)**

Principal drug	N	Average (mean) SDS score on MERIT entry	Average (mean) SDS score on MERIT exit	Wilcoxon signed-rank test results
Cannabis	361	7.9	5.2	$z=-10.49, p=0.000, r=-0.39$
Stimulants	165	8.2	5.5	$z=-6.90, p=0.000, r=-0.38$
Narcotics	132	9.5	6.1	$z=-7.50, p=0.000, r=-0.46$
Sedatives	19	9.1	5.5	$z=-2.78, p=0.005, r=-0.45$
Alcohol	10	4.9	2.2	$z=-2.04, p=0.042, r=-0.46$
Total SDS score	687	8.3	5.4	$z=-15.03, p=0.000, r=-0.41$

However, while these reductions in levels of dependence on illicit drugs upon exit from MERIT are significant and noteworthy, they still exceed established cut-offs for dependence<sup>40</sup>. For example, most principal users of heroin (scoring 3+; 84%; n=105), amphetamine (scoring 4+; 72%; n=103) and cannabis (scoring 3+; 77%; n=277) continued to score above the relevant dependency thresholds on the SDS upon exiting the MERIT program (González-Sáiz et al., 2009; Topp & Mattick, 1997; Swift, Copeland & Hall, 1998).

### 6.3 Injecting behaviour

Just over one-third (n=628; 34.8%) of all accepted defendants during 2008 had reportedly injected at some point in the past. Most of those with a history of injecting (94.1%; n=586) had also done so during the three months prior to their contact with MERIT.

<sup>40</sup> It could be argued that the willingness of MERIT participants to report dependent levels of use on exit from the program perhaps lends weight to the validity and reliability of self-report data for other health outcomes.

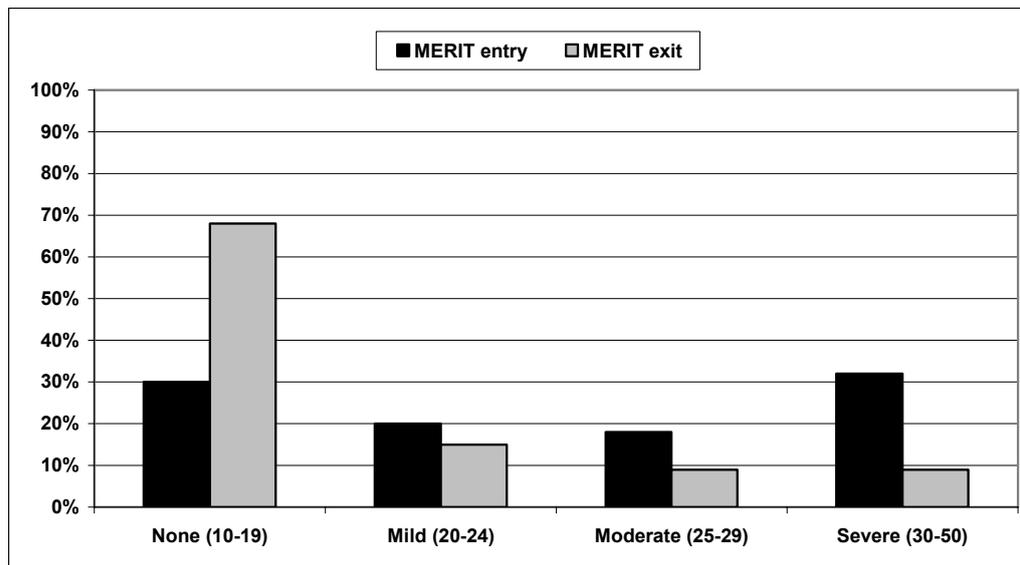
## 6.4 General Health and Well-being

### 6.4.1 Psychological distress

Levels of psychological distress amongst accepted MERIT defendants during 2008 were measured using the Kessler-10 (K-10) Psychological Distress Scale (Kessler et al., 2002). With possible scores ranging from 10 to 50, reduced K-10 scores are indicative of lower levels of psychological distress. The average (median) score for accepted MERIT defendants during 2008 was 24<sup>41</sup>. This is the highest threshold for mild psychological distress (scores in the region of 25-29 indicate moderate levels of distress). However, 30 per cent (n=400) of defendants had severe levels of psychological distress on admission to MERIT.

Amongst those defendants with K-10 data on entry and exit to the program during 2008 (n=685) there was a significant reduction<sup>42</sup> in overall scores: from 25 to 18 (i.e. from mild levels of psychological distress to no distress). As shown in Figure 6.3, below, there were also falls in the proportion of MERIT defendants experiencing moderate and severe levels of distress following their contact with the program.

**Figure 6.3: Changes in levels of psychological distress on entry to and exit from MERIT during 2008 (n=685)**



### 6.4.2 Physical and mental health (SF-36)

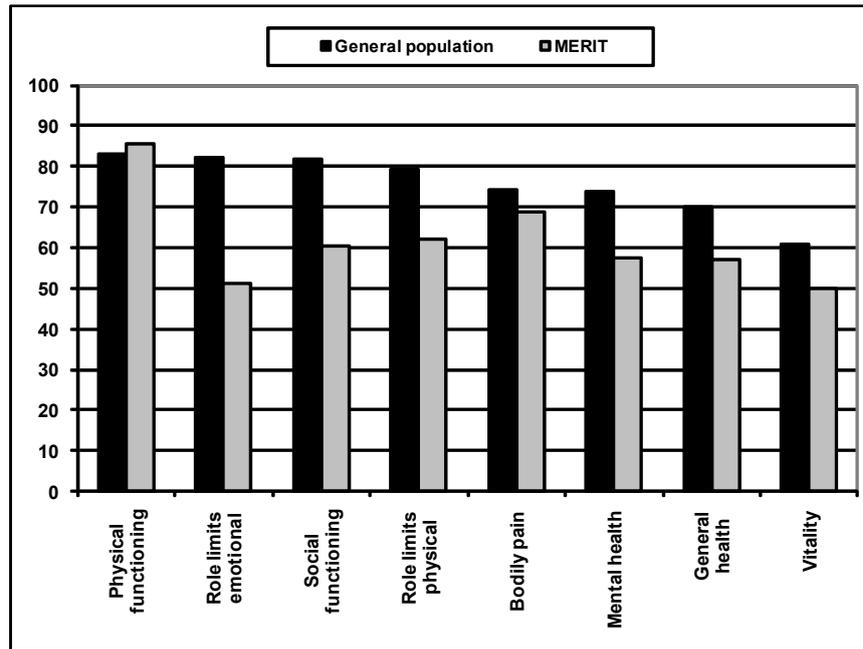
The physical and mental health of accepted MERIT participants was assessed using the SF-36 Health Survey (Ware, Snow & Kosinski, 1993). The survey assesses eight domains with possible scores ranging from 0 to 100, with higher scores indicating enhanced health and functioning. As illustrated in Figure 6.4, the accepted MERIT sample (n=1,310)<sup>43</sup> in 2008 had a poorer physical and mental health prognosis than the general population (Butterworth & Crosier, 2004) in seven of the eight domains considered.

<sup>41</sup> K-10 scores were missing in 492 cases.

<sup>42</sup>  $z = -17.89$ ;  $p = 0.000$ ;  $r = -0.48$ .

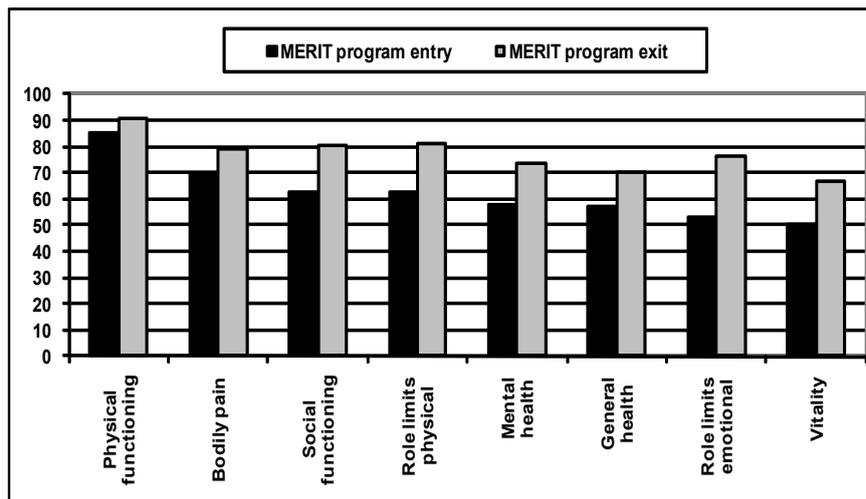
<sup>43</sup> SF-36 data were missing for 500 accepted cases.

**Figure 6.4: Average (mean) SF-36 subscale scores for MERIT participants during 2008 versus the general population**



Using available SF-36 data it was possible to assess the nature and extent of changes in physical and mental health amongst a sub-sample of accepted MERIT defendants during 2008 following their contact with the program (n=682). Using this approach there were statistically significant increases<sup>44</sup> in SF-36 scores recorded across each of the assessed domains (see Figure 6.5 below). The largest increases led to improvements in both general and mental health, and vitality and social functioning, moving the MERIT sample above the Australian population average in four of the eight assessed domains.

**Figure 6.5: Changes in average (mean) SF-36 subscale scores on entry to and exit from the MERIT program (2008) (n=682)**



<sup>44</sup> General health (z=-13.87; p=0.000; r=-0.38); mental health (z=-15.23; p=0.000; r=-0.41); bodily pain (z=-9.00; p=0.000; r=-0.24); physical functioning (z=-8.38; p=0.000; r=-0.23); role limits physical (z=-10.40; p=0.000; r=-0.28); role limits emotional (z=-11.48; p=0.000; r=-0.31); social functioning (z=-13.39; p=0.000; r=-0.36); and vitality (z=-14.95; p=0.000; r=-0.40).

## 7. FACTORS ASSOCIATED WITH PROGRAM COMPLETION

This chapter considers those factors related to program completion amongst the 1,857 accepted defendants who exited MERIT during 2008 (i.e. considering both completers and non-completers). Developing a better understanding of the issues affecting such outcomes is important for improving the overall effectiveness of the program since, as previously noted, completion of MERIT has been shown to significantly and substantially reduce the likelihood of committing any subsequent offences (Lulham, 2009).

There were a number of good quality variables contained within the MIMS dataset which could be hypothesised as potential factors influencing program completion. These included:

- demographics (e.g. age, gender, indigenous status);
- personal circumstances (e.g. marital status, dependents, educational attainment, housing, employment, current offence and prior prison time);
- substance use (previous exposure to treatment, nature and extent of substance use at entry, principal drug, injecting behaviour, level of dependency); and
- service-level effects (prior contact with the program, referral source, MERIT team attended, location and interventions received).

In 2007, the factors found to be significantly associated with completion were: indigenous status, age, gender, previous gaol time, number of previous MERIT episodes and principal income. From among the array of assembled variables described above, the factors found to be most significantly associated with program completion<sup>45</sup> during 2008 were:

- Being employed ( $\chi^2 = 28.1$ ;  $df=1$ ;  $p=0.000$ )
- Seeking support principally around the use of cannabis ( $\chi^2 = 17.2$ ;  $df=1$ ;  $p=0.000$ )
- Receiving counselling ( $\chi^2 = 10.1$ ;  $df=1$ ;  $p=0.001$ ) and other (e.g. mental health, employment, education and/or health) forms of support ( $\chi^2 = 9.4$ ;  $df=1$ ;  $p=0.002$ )
- Being of non-Indigenous status ( $\chi^2 = 8.8$ ;  $df=1$ ;  $p=0.003$ )
- Being older (aged 29 or above) ( $\chi^2 = 8.1$ ;  $df=1$ ;  $p=0.004$ )
- Living in a privately owned house or flat ( $\chi^2 = 7.9$ ;  $df=1$ ;  $p=0.005$ )
- Living alone with child(ren) ( $\chi^2 = 5.9$ ;  $df=1$ ;  $p=0.015$ ).

As observed in previous MERIT Annual Reports (Bolitho & Matruglio, 2006: 23), there are also area-level differences in program completion rates. For example, during 2008 completion was positively correlated with attendance at three MERIT teams (largest effect size  $r=0.57$ ;  $p<0.05$ ) and negatively correlated with attendance at five teams (largest effect size  $r=-0.62$ ;  $p<0.01$ ). Moreover, defendants accessing support from the MERIT team with the highest program completion rate in 2008 were three times more likely to complete the program than those

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<sup>45</sup> Conversely, the factors most significantly associated with non-completion of a MERIT program in 2008 included being: a recent injector ( $\chi^2 = 34.8$ ;  $df=1$ ;  $p=0.000$ ); in receipt of temporary benefits ( $\chi^2 = 38.2$ ;  $df=1$ ;  $p=0.000$ ); a problematic user of stimulants ( $\chi^2 = 8.1$ ;  $df=1$ ;  $p=0.004$ ) or narcotics ( $\chi^2 = 8.2$ ;  $df=1$ ;  $p=0.004$ ) at entry; homeless ( $\chi^2 = 6.2$ ;  $df=1$ ;  $p=0.013$ ); having more than one pending charge ( $\chi^2 = 6.3$ ;  $df=1$ ;  $p=0.012$ ) or charges relating to theft and handling offences ( $\chi^2 = 4.3$ ;  $df=1$ ;  $p=0.037$ ); or having previously been to residential rehabilitation ( $\chi^2 = 6.0$ ;  $df=1$ ;  $p=0.014$ ).

accessing support from the team with the lowest rate of completion<sup>46 47</sup>. Similarly, those residing in and accessing MERIT services from regional locations were significantly less likely to complete a program than those in other areas ( $\chi^2 = 9.7$ ;  $df=1$ ;  $p=0.002$ ).

However, while these area level variations may reflect differences in how MERIT interventions are implemented and delivered by different teams (e.g. approaches to case management, enforcement styles or the accessibility of services), they may also be the consequence of important differences in the characteristics of the defendants being engaged by teams in different areas. The MERIT team with the highest rate of completion in 2008, for instance, had a lower proportion of principal stimulant (17%) and narcotic (8%) using defendants than the team with the lowest rate of completion (29% and 15% respectively).

In order to identify those factors most predictive of MERIT program completion, linear logistic regression analyses were undertaken in an attempt to (i) disentangle any inter-relationships between defendant characteristics and area-level influences, and (ii) establish whether the predictor variables associated with completion were themselves linearly related (known as multicollinearity).

The results (which are set out in more detail in Appendix A) indicate that aspects of service delivery – team attended ( $\beta=.10$ ;  $p=0.009$ ) and type of intervention received ( $\beta=.10$ ;  $p=0.010$ ) – were more important in predicting the likelihood of completing a MERIT program in 2008 than the characteristics or circumstances of defendants themselves (e.g. being a principal cannabis user ( $\beta=.08$ ;  $p=0.048$ ))<sup>48</sup>.

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<sup>46</sup>  $\text{Exp}(B) = 2.6$ ;  $CI = 1.5 - 4.6$ ;  $p=0.001$ . Here the MERIT team with the lowest completion rate in 2008 served as the reference variable and was omitted from the model.

<sup>47</sup> The odds ratio for the likelihood of completion between the MERIT teams with the lowest and highest rate of completion increased to eight ( $CI = 3.5 - 19.5$ ;  $p=0.000$ ) when all referrals during 2008 were considered (the 'intention to treat' group) rather than just those accepted onto the program during this period (the 'treated' group).

<sup>48</sup> Standardised beta values ( $\beta$ ) provide an indication of the importance of each predictor in the model; the higher the value of  $\beta$  the more important the variable is within the model for predicting completion.

## **8. CRIMINAL JUSTICE OUTCOMES**

In order to ensure consistency with the approach adopted during previous Annual Reports, sentence outcome and reconviction data are presented here for defendants completing MERIT in the previous calendar year (i.e. during 2007).

By matching unique attributor codes for MERIT participants to their Local Court and re-offending databases, BoCSAR, on behalf of NDARC, was able to provide measures of criminal justice outcomes by comparing post-program sentences and reconviction rates for program completers and non-completers during 2007. More specifically, this process provided information on:

- the principal penalty received by MERIT defendants;
- the number of defendants brought back before the Local Court within 12 weeks of commencing MERIT; and
- reconvictions within 6 and 12 months of exiting the program.

From the 1,786 defendants exiting the program in 2007 for whom information was sent by MERIT to BoCSAR, 1,693 (94.8%) were successfully matched to the relevant court and reconviction datasets.

### **8.1 Sentence outcomes**

As was the case for the 2006 MERIT cohort, there were considerable differences between the principal penalty outcome for program completers and non-completers in 2007. The most common sentence outcomes for MERIT program completers were again a bond with supervision (22.0%; n=243) or a bond without supervision (18.5%; n=205). By comparison, the most common sentence outcomes for program non-completers were a term of imprisonment (22.7%; n=117) or a fine (20.7%; n=107). Sentence outcomes for the 1,622 MERIT defendants matched by BoCSAR are set out in Table 8.1.

**Table 8.1: Sentence outcomes for MERIT defendants (2007) (n=1,622)**

Principal penalty <sup>49</sup>	Program completion status	
	Completed	Not completed
Imprisonment (adult)	58 (5.2%)	117 (22.7%)
Juvenile control order (juvenile)	1 (0.1%)	0
Periodic detention	17 (1.5%)	6 (1.2%)
Suspended sentence with supervision (adult)	154 (13.9%)	44 (8.5%)
Suspended sentence without supervision (adult)	82 (7.4%)	29 (5.6%)
Suspended control order without supervision (juvenile)	0	1 (0.2%)
Community service order (adult)	64 (5.8%)	15 (2.9%)
Bond with supervision (adult)	243 (22.0%)	61 (11.8%)
Bond without supervision (adult)	205 (18.5%)	50 (9.7%)
Fine	110 (10.0%)	107 (20.7%)
Bond without supervision (juvenile)	0	1 (0.2%)
Nominal sentence	21 (1.9%)	4 (0.8%)
Bond without conviction	53 (4.8%)	8 (1.6%)
No conviction recorded	33 (3.0%)	4 (0.8%)
No action taken	1 (0.1%)	1 (0.2%)
No penalty	64 (5.8%)	68 (13.2%)
<b>Total<sup>50</sup></b>	<b>1,106 (100%)</b>	<b>516</b>

Between 2002 and 2007, the proportion of MERIT non-completers receiving penalties involving imprisonment (from 26.1% to 22.7%) and fines (27.5% to 20.7%) fell. The proportion of non-completers for whom the Local Court imposed no penalty also increased over the same period (from 8.6% to 13.2%). During this time there were large increases in the proportion of non-completers sentenced to bonds with and without supervision, and in the use of suspended sentences with supervision.

<sup>49</sup> Where the first court appearance was finalised within the six months after program exit in 2007, or in the month before program exit.

<sup>50</sup> Sentencing data were not available for 71 of the 1,693 cases matched to ROD.

By contrast, the proportion of program completers subsequently imprisoned doubled over this five year period (from 2.2% to 5.2%). However, the rate at which completers received no penalty also increased (from 1.9% to 5.8%). The increased use of disposals for program completers broadly mirrored those imposed against non-completers during this period (i.e. through the increased use of bonds with and without supervision or conviction, and in the use of suspended sentences with supervision) (Bolitho & Matruglio, 2006: 35).

When interpreting these sentencing data it is important to note that the penalties imposed against both program completers and non-completers will be influenced by a broad range of factors: defendant needs, circumstances, levels of risk posed (both of harm and reoffending), seriousness of the current offence(s) and compliance with MERIT. Therefore any variations in sentence outcomes are likely to be influenced as much by differences in levels of 'criminogenic' need between participants as they are by any effect of the MERIT program.

## 8.2 Re-offending

As with previous Annual Reports, details of finalised court appearances for new charges and consequent convictions following entry to the MERIT program serve as a proxy measure of reoffending<sup>51</sup>.

### 8.2.1 Reconviction within 12 weeks of commencing MERIT<sup>52</sup>

Consistent with findings from previous Annual Reports, program non-completers in 2007 were significantly more likely to be reconvicted for another offence in the 12 weeks following commencement of MERIT than program completers (p=0.000). Table 8.2 describes the number and proportion of 2007 MERIT participants who were convicted for a new offence during this period.

When interpreting these figures it is important to note that some defendants may have exited MERIT in less than 12 weeks and consequently may not have been in receipt of MERIT interventions at the time of the offence. Furthermore, re-offending while on MERIT can be cause for a defendant to be removed from the program and/or for having their bail conditions withdrawn.

**Table 8.2: Rate of reconviction within the 12-week MERIT program period (2007) (n=1,693)**

Any reconvictions within 12 weeks of program entry date?	Program completion status	
	Completed	Not completed
Yes	151 (13.3%)	216 (38.7%)
No	984 (86.7%)	342 (61.3%)
<b>Total</b>	<b>1,135 (100%)</b>	<b>558 (100%)</b>

<sup>51</sup> Although the use of convictions data is an internationally established benchmark with which to measure rates of re-offending, previous estimates in other jurisdictions have indicated that only 3 in every 100 offences committed will result in a caution or conviction (Barclay and Tavares, 1999: 29).

<sup>52</sup> This refers to any subsequent convictions where the re-offence date was within 12 weeks of commencing MERIT.

### 8.2.2 Reconvictions post-MERIT contact<sup>53</sup>

Six months after completing the MERIT program 29.3 per cent of those defendants exiting the program in 2007 had been reconvicted for a further offence (n=496). By the time 12 months had elapsed this figure had increased to 41.6 per cent reconvicted for another offence (n=705). Consistent with findings from previous research examining the impact of MERIT on rates of recidivism, program completers were significantly less likely than non-completers to have been reconvicted 6 and 12 months after exiting the program (p=0.000) (see Table 8.3)<sup>54</sup>.

**Table 8.3: Rates of reconviction at 6 and 12 months for exiting MERIT defendants (2007) (n=1,693)**

Reconviction rates within 6 and 12 months of program exit date	Program completion status	
	Completed	Not completed
Reconvicted at 6 months	260 (22.9%)	236 (42.3%)
Reconvicted at 12 months	405 (35.7%)	300 (53.8%)
<b>Total</b>	<b>1,135 (100%)</b>	<b>558 (100%)</b>

<sup>53</sup> Based on the number of subsequent convictions where the re-offence date was within 6 or 12 months of the MERIT program completion date. These data have not been adjusted to take into account 'time at reduced risk' (i.e. periods of imprisonment or inpatient treatment).

<sup>54</sup> We had no data on whether there were reductions in the frequency (number of offences leading to conviction) or severity of offending during this follow-up period.

## 9. DISCUSSION AND CONCLUSIONS

This chapter draws together the main conclusions reached following our analysis of program activities during 2008 and tentatively explores some of the key implications of these findings for ongoing MERIT provision.

The report identified a number of positive developments during 2008 which indicate that the program had sustained and reinforced many of the achievements made during previous years. Notable examples included:

- increasing referral rates for Indigenous defendants;
- increasing acceptance rates amongst women referred to the program;
- continuing to engage an intractable target group (e.g. a highly substance use dependent cohort; around half of whom have previously been imprisoned and just under a third reporting no previous contact with treatment services);
- completion rates in 2008 were the highest recorded throughout the life of the MERIT program;
- brokering access to a range of interventions and ongoing support for many participants;
- facilitating statistically significant reductions in the self-reported frequency and intensity of all forms of substance use, and in the nature and extent of general, physical and mental health problems experienced by defendants; and
- contributing towards ensuring that program completers (in 2007) were significantly less likely to be reconvicted for another offence following their contact with the program.

These positive achievements were also accompanied by other developments that are likely to require further monitoring and/or remedial action. For instance, whilst natural fluctuations to rates of referral are to be expected with a program on the scale of MERIT, the 7 per cent fall in referrals witnessed in 2008 is perhaps a timely reminder of the need to maintain awareness levels of the program amongst potential referrers and continually exploit any opportunities to increase numbers from under-utilised sources (e.g. building on the momentum following the NSW Police Drug and Alcohol Coordination Unit's Excellence in Law Enforcement Award at the 2009 National Drug and Alcohol Awards to increase referrals from the police).

In addition, the observation that for most participants, levels of dependence on illicit drugs upon exit from MERIT continued to exceed established thresholds for dependency is indicative of the need to ensure adequate arrangements are in place to ensure ongoing aftercare and throughcare for defendants beyond the life of program. This is particularly important given the problems reported by NSW probation staff in accessing appropriate substance misuse treatment for those under their supervision (Weatherburn & Trimboli, 2008).

### **The effect of local variations in MERIT delivery**

The finding that older, well integrated cannabis users fared better than others is likely to have limited utility for informing the ongoing development of the program. Arguably of greater relevance, from a policy and practice perspective, is the observation that aspects of service delivery – team attended and type of intervention received – were more important in predicting the likelihood of completing a MERIT program in 2008 than the characteristics or circumstances of defendants. This is not a particularly novel finding, however: the influence of agency-level effects on treatment outcomes is well documented in other jurisdictions (e.g. Moos & Moos, 2008 MERIT Annual Report

1998; Millar, Donmall & Jones, 2004; Marsden et al., 2009; Taxman, Henderson & Belenko, 2009).

This would seem to indicate that variations to practice and delivery at a local level exert some influence on MERIT outcomes. This finding could have a number of different explanations – none of which we are able to accurately diagnose using MIMS data alone. Taken at face value, this would suggest that MERIT staff in some areas perform more effectively than those in others when it comes to securing defendant compliance - thus increasing the chances of program completion. However, a key question that our report is unable to answer is whether, and to what extent, these differences are attributable to variations in local MERIT practices (e.g. approaches to case management, enforcement styles) or other confounding factors (e.g. differences in the quality, range and accessibility of services to which defendants can be referred). Again, the benefits of delivering complementary psycho-social (Marsden et al., 2009) and integrated forms of ancillary support (McSweeney and Hough, 2006) to substance misusers have been noted elsewhere.

### **The causes of non-completion and strategies to address them**

We believe our analysis offers a number of pointers for further refining and improving the overall effectiveness of the MERIT program. In the first instance this could entail a greater focus on:

- improving knowledge and understanding about the causes of non-completion; and
- developing strategies to better engage those at particular risk.

There would seem to be obvious merits in embarking on a process that: (a) sought the views of MERIT teams on the causes of non-completion and the tactics and strategies they employ to address these; and (b) also involved MERIT defendants in order to better understand the processes which facilitate their engagement with the program and of equal importance, what factors prompt them to disengage. This work would also need to explore how, if at all, these tactics and strategies are adapted in order to respond to different defendant profiles (cannabis vs. narcotic users) in different settings (rural vs. urban).

As the program reaches its tenth operational year there is undoubtedly considerable scope for harnessing the wealth of knowledge and experience accumulated during this time. This could involve a greater emphasis on identifying best practice lessons from high performing areas around effective strategies for promoting engagement and compliance amongst MERIT participants. This knowledge could then be deployed to develop and implement a range of effective and evidence-based compliance strategies tailored specifically for those groups that present with a high risk of program non-completion (i.e. young defendants, Indigenous participants and users of stimulants and narcotics).

Given the greater propensity for involvement in serious acquisitive crime amongst users of stimulant and narcotic drugs (Bennett, Holloway & Farrington, 2008), it seems likely that the crime prevention impact of MERIT would be further enhanced by developing strategies targeting these particular groups shown by our analysis to be at heightened risk of non-completion.

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**Appendix 1: Results of linear logistic regression analysis to determine those factors most predictive of MERIT completion**

In an attempt to (i) disentangle any inter-relationships between defendant characteristics and area-level influences, and (ii) establish whether the predictor variables associated with completion were themselves linearly related (multicollinearity), linear logistic regression analyses were undertaken in order to identify those factors most predictive of MERIT program completion.

Predictor variables were entered into the regression model one by one, in descending order of statistical significance. The results as they relate to the model's parameters are set out in Table A1.

**Table A1: Parameters of a linear logistic regression model to determine factors predictive of MERIT program completion in 2008**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1 (Constant)	.600	.048		12.556	.000	.506	.694		
Employed	.108	.048	.087	2.269	.024	.015	.202	.971	1.030
Cannabis	.065	.033	.076	1.977	.048	.000	.130	.956	1.045
Counselling	.113	.044	.100	2.584	.010	.027	.199	.949	1.053
Other support	.093	.036	.102	2.601	.010	.023	.163	.926	1.080
Non-ASTI status	.065	.045	.057	1.469	.142	-.022	.153	.950	1.052
Aged 29+	.026	.033	.031	.789	.430	-.039	.090	.934	1.071
Own house/flat	.013	.039	.013	.340	.734	-.063	.090	.956	1.046
MERIT team 'A'	.205	.078	.101	2.620	.009	.051	.359	.961	1.040
Live alone with child(ren)	.095	.084	.044	1.134	.257	-.070	.260	.960	1.042

a. Dependent Variable: Completed (starts only)

The standardised coefficient beta values ( $\beta$ ) provide an indication of the importance of each predictor in the model; the higher the value of ( $\beta$ ) the more important the variable is within the model for predicting completion. The most predictive variables within the model were:

- attending MERIT team 'A' ( $\beta=.10$ ;  $p=0.009$ );
- receiving 'other' forms of external support (i.e. mental health, employment, education, health) ( $\beta=.10$ ;  $p=0.010$ );
- receiving counselling ( $\beta=.10$ ;  $p=0.010$ );
- being employed ( $\beta=.09$ ;  $p=0.024$ ); and
- being a principal cannabis user ( $\beta=.08$ ;  $p=0.048$ ).

All other predictors failed to reach statistical significance.

As Field (2005: 196) observes, a variance inflation factor (VIF) below 10 and tolerance statistics above .2 would indicate that there is no collinearity within the data.

The results also show that the confidence intervals for many of the defendant characteristics also cross zero, indicating that the defendant-specific predictors had both positive and negative relationships with MERIT completion within the sample for 2008. As Field (ibid: 194) again cautions, wide confidence intervals are indicative that the estimates within models are unlikely to be representative of true population values.

Furthermore, the variables contained within the model explain only 55 per cent of the variance in MERIT program completion rates during 2008 ( $R^2=0.55$ ). This means that much of the variance in MERIT completion rates during this period are likely to be explained by other (unaccounted for) factors and variables.