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The impact of intensive correction orders on re-offending

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Aim: To examine the risk of re-offending of those who received an intensive correction order (ICO), relative to those who received periodic detention and suspended sentences with supervision.

Method: Details of offenders' demographic and offence characteristics, prior convictions and penalties received, and reoffences were extracted from the Re-offending Database maintained by the NSW Bureau of Crime Statistics and Research.
Using propensity score modelling, offenders who received an ICO as a principal penalty in a NSW court between 1 October
2010 and 30 September 2012 were matched to two comparable groups of offenders who received periodic detention
between 1 October 2007 and 30 September 2009 and suspended sentences with supervision between 1 October 2010
and 30 September 2012. A supplementary comparison with those who received suspended sentences with supervision
included matching on Level of Service Inventory - Revised (LSI-R) assessment scores, in addition to demographic and
offending characteristics. Time to first re-offence was estimated using the Nelson-Aalen estimator of the cumulative hazard
rate function and compared between groups using Cox proportional hazards regression.

Results: An offender on an ICO had 33 per cent less risk of re-offending than an offender on periodic detention (HR=0.67, 95% confidence interval (0.55, 0.83), p<.001). There was no significant difference in re-offending between those who received ICOs and supervised suspended sentences after taking into account LSI-R assessment scores.

Conclusion: There is some evidence to suggest that ICOs are more effective than periodic detention in terms of reoffending rates. However, future evaluations should include more detailed offender, treatment and program participation information in order to better understand any observed differences between comparison groups.

Keywords: intensive supervision, re-offending, LSI-R, propensity score matching.

INTRODUCTION

On 28 June 2010, the NSW Parliament passed the Crimes (Sentencing Legislation) Amendment (Intensive Correction Orders) Bill. The Bill removed the sentencing option of periodic detention and introduced a new sentencing option — the intensive correction order (ICO) — "designed to reduce an offender's risk of re-offending through the provision of intensive rehabilitation and supervision in the community" (Attorney General's Second Reading Speech, Hansard, 28 June 2010). Like periodic detention, an ICO is an alternative to full-time imprisonment that allows an offender to retain employment and remain in contact with family networks while serving the sentence. ICOs were designed to address some of the shortcomings of periodic detention including that periodic detention was not available throughout the State and that periodic detention detainees were not effectively case managed

or rehabilitated. In his second reading speech to the ICO bill, the then Attorney General, the Honourable John Hatzistergos announced that the NSW Bureau of Crime Statistics and Research (BOCSAR) would evaluate the effect of ICOs on reoffending. This report presents the findings of that evaluation.

THE ICO PROGRAM

Under section 7 of the *Crimes (Sentencing Procedure) Act* (1999), a court that has come to the decision to sentence an offender to imprisonment for not more than 2 years may make an ICO directing that the sentence be served by way of intensive correction in the community. Courts must refer offenders to the Commissioner of Corrective Services NSW (CSNSW) for a suitability assessment before imposing an ICO. They can do this *before* they have imposed a sentence of imprisonment on an offender, but only *after* they have considered all the alternatives

and are satisfied that no sentence other than imprisonment is appropriate and that the sentence length is likely to be no more than 2 years. Before imposing an ICO on an offender, a sentencing court has to be satisfied (among other things) that the offender is a suitable person for the order and that he or she has signed an undertaking to comply with their obligations under the order. Section 66 of the Act prohibits the imposition of an ICO on offenders convicted of certain sexual offences.

In assessing an offender's suitability for an ICO, the Act requires the Commissioner of CSNSW to consider a number of factors including: the age and criminal history of the offender; the likelihood that he or she will re-offend: whether the offender will have suitable accommodation for the duration of the order; whether the making of an ICO would place any person living with, or in the vicinity of, the offender, at risk; the offender's drug or alcohol dependency, and physical and mental health; and the availability of community work and resources to supervise an offender. The assessment report must also include information on whether there are any interventions that could address the factors associated with the offender's criminal conduct and whether adequate resources are available to deliver those interventions. The ability of the offender to comply with community work is a key consideration in assessing an offender's suitability.

Offenders placed on ICOs are required to:

- complete a minimum of 32 hours of community service work per month;
- participate in programs to address his or her offending behaviour;
- submit to drug testing; and
- comply with all reasonable directions from a CSNSW supervisor.

Programs available to offenders include programs targeting drug and alcohol issues, and anger management issues, and programs to improve employment skills or address literacy problems.

When imposing an ICO, a court may also require the offender to:

- submit to electronic monitoring;
- comply with a curfew;
- · submit to alcohol testing;
- submit to random, unannounced home visits; and
- comply with other restrictions or requirements.

Offenders are 'progressed' or 'regressed' through various levels of supervision and conditions, depending on the behaviour of the offender throughout the term of the ICO (CSNSW, 2013). Box 1 describes the levels in place when ICOs were first introduced. The default starting level for ICO offenders was Level 2. Level 1 included weekly contact when combined with electronic monitoring. However, Level 1 was rarely utilised.

Since the introduction of ICOs the levels of supervision provided have undergone several revisions. In March 2012 the model in Box 1 was replaced with a 5-stage model. Further, in April 2013, the supervision levels for offenders on ICOs, suspended sentences, bonds and parole were replaced with a single model where supervision intensity is based on a combination of risk, needs, and the potential impact of subsequent offending. In the period 2010-2012 the supervision levels for offenders on bonds and parole were based on Level of Service Inventory - Revised (LSI-R) assessment scores, with the level of contact varying from monthly to weekly depending on an offender's level of risk (with five levels of risk from low through to high). Thus, under the models in place through 2010-2012, low risk offenders on an ICO were more likely to receive a higher level of contact compared to those on a bond (at least initially) whilst medium and higher risk offenders were more likely to receive an equal or lesser level on an ICO.

INTENSIVE SUPERVISION & RECIDIVISM

ICOs were intended to combine intensive supervision with community service, treatment and rehabilitation. Intensive supervision has been shown to reduce re-offending. The Washington State Institute for Public Policy (WSIPP) conducted

	Level 3	Level 4
Discretionary curfew	No curfew	No curfew
Discretionary electronic monitoring	No electronic monitoring	No electronic monitoring
Minimum face-to-face contact with CSNSW supervisor: fortnightly.	Minimum face-to-face contact with CSNSW supervisor: monthly.	Minimum face-to-face contact with CSNSW supervisor: six-weekly.
linimum of 32 hours per month of	of work supervised by CSNSW.	
Programs as direc	cted by CSNSW.	
Drug te	esting.	
 	Discretionary electronic nonitoring Minimum face-to-face contact with CSNSW supervisor: ortnightly. Inimum of 32 hours per month of Programs as direct Drug te	Discretionary electronic No electronic monitoring nonitoring Minimum face-to-face contact with CSNSW supervisor: Minimum face-to-face contact with CSNSW supervisor:

a systematic review of the literature regarding "what works" for community supervision (Drake, 2011). More specifically, findings on intensive supervision focused on increased surveillance, intensive supervision coupled with treatment, and supervision using the Risk-Need-Responsivity (RNR) approach were examined. The RNR approach relates to providing supervision and treatment levels that are commensurate with the risk of recidivism (Lowenkamp, 2004). It was concluded that intensive supervision focused on surveillance achieved no reduction in recidivism; intensive supervision coupled with treatment achieved about a 10 per cent reduction in recidivism; and supervision focused on the RNR approach achieved a 16 per cent reduction in recidivism.

Although treatment-oriented intensive supervision programs can reduce re-offending, the effectiveness of any rehabilitation program is likely to vary according to the level of supervision under which offenders are placed, and the quality, duration and appropriateness of any treatment/support provided. In the meta-analysis of intensive supervision conducted by the WSIPP, the average number of face-to-face monthly contacts for studies included in the meta-analysis of intensive supervision was 12. While supervision without treatment had no detectable effects on recidivism rates, in those who received treatment during supervision more face-to-face contacts were associated with a greater reduction in recidivism (Drake, 2011). A further point to note is that the analysis of RNR studies spanned supervision delivered to moderate to high risk offenders on both probation and parole. According to the RNR approach to offender rehabilitation promoted by Andrews and Bonta (1998); to be maximally effective, rehabilitative interventions need to target high risk offenders, address their criminogenic needs (i.e., the factors that influence their involvement in crime) and be adapted to the learning styles, motivation and abilities of the target offender group. There is strong evidence that rehabilitation programs targeting offenders at high risk of re-offending produce larger reductions in re-offending than those targeting offenders at medium or low risk (Andrews, Bonta, & Wormith 2006). Indeed, it has been found that intensive supervision can actually increase the recidivism rates of lower-risk offenders (Lowenkamp, 2004).

THE CURRENT STUDY

This evaluation compares the effectiveness of ICOs in reducing re-offending relative to two comparison groups who received other alternatives to imprisonment. The first comparison group received a periodic detention sentence prior to the introduction of ICOs. The second comparison group received a suspended sentence with supervision after the introduction of ICOs.

Periodic detention was a sentence of imprisonment that involved the offender initially remaining in custody two days per week (usually the weekend) and living in the community five days per week. In later stages of the sentence, subject to the offender's compliance, two days of community service work could be undertaken, rather than imprisonment. Each consecutive two-day period of periodic detention served counted as the equivalent

of one week in full-time custody (NSW Sentencing Council, 2007). As previously mentioned, periodic detention provided little to no capacity for the case management of offenders and lacked access to long-term rehabilitation programs to address the underlying causes of the offender's criminal behaviour (NSW Sentencing Council, 2007). Further, periodic detention was associated with high rates of absenteeism and was not available across the State. Periodic detention was abolished in 2010 at the same time that ICOs were introduced.

A suspended sentence is another alternative to full-time imprisonment and involves the court ordering an offender, who remains in the community, to enter into a good behaviour bond for up to 2 years. The sentence of imprisonment is only served if the good behaviour bond is breached. The court can include additional conditions requiring the offender to be supervised by Corrective Services NSW and/or participate in an intervention program. As such, those who receive a supervised suspended sentence may ultimately receive similar levels of supervision and treatment to those who received an ICO. However, unlike for an ICO, community service work is not a requirement of a suspended sentence.

While prior research has shown that offenders who received periodic detention and supervised suspended sentences had similar profiles to offenders receiving ICOs (Ringland, 2012). the current study used propensity score matching (PSM) to identify groups of offenders who were comparable in terms of a range of demographic and offending characteristics. Despite the use of PSM, and particularly because of the suitability assessment criteria which those on an ICO had to meet. the possibility remained that those receiving ICOs differed to those who received periodic detention and supervised suspended sentences in ways not captured by the available data. A supplementary analysis was conducted in which LSI-R assessment scores were also included when matching offenders. While the LSI-R may not be sensitive to all factors relevant to the ICO suitability assessment it does measure elements of dynamic risk (e.g., current drug or alcohol problem, number of changes of accommodation within the 12 months prior). Matching on LSI-R scores could only be conducted for the comparison of ICOs with supervised suspended sentences because LSI-R data were not available for a large enough proportion of offenders who received periodic detention.

METHOD

DATA SOURCES

Details of offenders' demographic and offence characteristics, prior court appearances and penalties received, and reoffences were extracted from the Re-offending Database (ROD) maintained by BOCSAR. ROD contains information on all finalised court appearances in NSW since 1994, as well as cautions and youth justice conferences since 1998. Data were available up until 30 June 2013. Information regarding the development of ROD can be found in Hua and Fitzgerald (2006).

LSI-R data were obtained from Corrective Services NSW and linked to ROD using a range of person identifiers (e.g., name, date of birth, master index number, central names index, etc.). LSI-R assessments were conducted by qualified staff within Corrective Services NSW, such as probation and parole officers and psychologists.

SAMPLE

The primary group of interest consisted of adult offenders who received an ICO as a principal penalty¹ in a NSW court between 1 October 2010 and 30 September 2012. As noted earlier, these offenders were compared with offenders who received principal penalties of:

- periodic detention between 1 October 2007 and 30 September 2009 (i.e., in a 24-month period beginning from 3 years prior to the introduction of ICOs); and
- suspended sentences with supervision between 1 October 2010 and 30 September 2012 (i.e., during the same period as ICOs).

Selection criteria

Prior to using propensity score matching methods to identify offenders who had comparable probabilities of receiving an ICO, selection criteria were applied to the ICO, periodic detention and supervised suspended sentence samples. To be eligible for an ICO, an offender must be at least 18 years of age, the court must be considering a sentence of imprisonment of 2 years or less and the offence for which the offender is being sentenced cannot be a prescribed sexual offence. In line with these criteria, those less than 18 years of age, those who ultimately received sentences longer than 2 years, and those being sentenced for a prescribed sexual offence were excluded from comparisons of ICOs with periodic detention and supervised suspended sentences.²

Additional selection criteria, specific to periodic detention and supervised suspended sentence comparisons, were applied. To be eligible for periodic detention, offenders were not to have previously received a sentence of full-time imprisonment of 6 months or longer. In order to include like offenders in the comparison of ICOs and periodic detention, offenders who had received a sentence of full-time imprisonment of 6 months or longer in the 10 years prior to the index date were excluded.

When comparing ICOs and supervised suspended sentences, offenders who received a sentence of an ICO as well as a supervised suspended sentence, at the same court appearance, were excluded. Further, to render the samples more comparable, those who appeared before the court for a breach of a suspended sentence were excluded from the comparison of ICOs and supervised suspended sentences. Very few offenders who received a supervised suspended sentence had breached a suspended sentence.³

Finally, it was possible that the one offender may have received multiple sentences, of the same or different type, during the periods of interest. Only the first instance of each sentence type (ICO, periodic detention, supervised suspended sentence) was considered for inclusion when using propensity score matching. Thus, the same offender may have been included in more than one sample, for penalties received at different court finalisations throughout the period. For example, an offender may have been in both the ICO and periodic detention samples.

Figures 1 and 2 show how applying the selection criteria influenced the number of offenders available for analysis. In the comparison of ICOs with periodic detention, the index court appearances of 1,076 offenders (corresponding to 79% of court appearances between 1 October 2010 and 30 September 2012 that resulted in an ICO as a principal penalty) remained eligible for inclusion (see Figure 1). Similarly, in the comparison of ICOs with supervised suspended sentences, the index court appearances of 1,097 offenders (corresponding to 81% of court appearances between 1 October 2010 and 30 September 2012 that resulted in an ICO as a principal penalty) remained eligible for inclusion (see Figure 2). Further, of the 1,097 offenders who met the criteria for inclusion in the comparison with supervised suspended sentences, 1,028 (94%) had a LSI-R assessment within 12 months prior and 3 months post index finalisation.

VARIABLES

Re-offending outcome

A re-offence proven in court was used as a measure of recidivism. A re-offence was identified as any proven offence committed (i.e., with an offence date) after the index court finalisation relating to the ICO, periodic detention, or supervised suspended sentence (this date is referred to as the 'index date').

The re-offending outcome examined in this study was:

• Time to first re-offence: the number of months from the index date until the first proven re-offence.

For the purposes of this study, breaches of custodial and community-based orders were not included as re-offences.⁴

Data on finalised court appearances were available up until 30 June 2013. As such, only re-offences finalised in court by this time could be captured. To allow time for re-offences to be processed in court, re-offences with offence dates up until 31 December 2012 were counted for ICO and supervised suspended sentence groups. Similarly, for those in the periodic detention group, re-offences that occurred up until 31 December 2009 were counted. Some re-offences that occurred later in the follow-up period and/or those that took longer than 6 months to finalise in court, may have been missed.

The specifications applied to the samples in relation to index dates and the re-offending outcome are presented in Table 1, along with the numbers of offenders meeting the sample selection criteria. Details relating to the analysis of the re-offending outcome are discussed further in the 'Statistical Analysis' section.

Figure 1. Selection criteria applied to those who received intensive correction orders and periodic detention as principal penalties

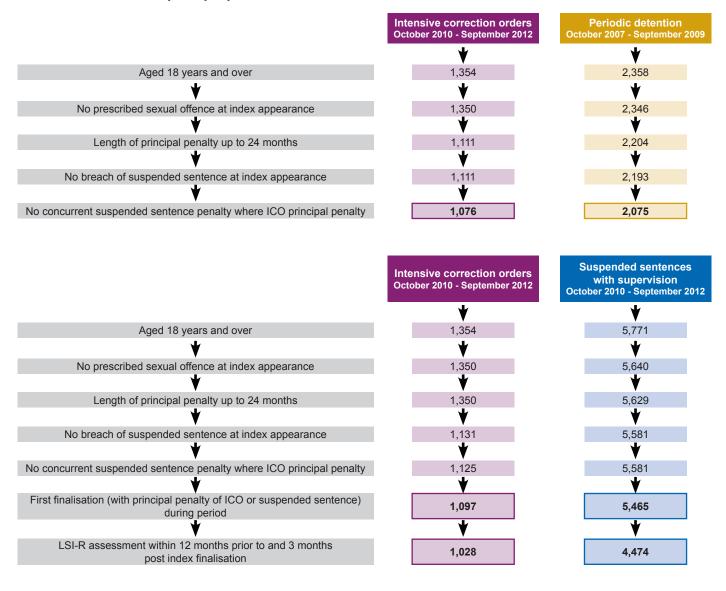


Table 1. Samples and re-offending outcomes

Samples				Re-offending outcome		
		ICOs vs Periodic detention	ICOs vs Supervised suspended sentences	ICOs vs Supervised suspended sentences: supplementary	Offence date	Finalised in court by
Penalty	Index dates	N	N	N		
Intensive correction order	1 October 2010 - 30 September 2012	1,076	1,097	1,028	Up until 31 December 2012	30-Jun-13
Periodic detention	1 October 2007 - 30 September 2009	2,075			Up until 31 December 2009	30-Jun-10
Supervised suspended sentence	1 October 2010 - 30 September 2012		5,465	4,474	Up until 31 December 2012	30-Jun-13

'Treatment' variable

The 'treatment' variable was whether the principal penalty was an ICO, periodic detention or supervised suspended sentence.

Explanatory variables

There is no general consensus on which variables should be included in propensity score models but Austin (2011, p. 414) argues that models should include both factors that influence 'treatment' (i.e., the penalty received) and factors that influence outcome (i.e., re-offending). Numerous variables have been shown in past research to influence penalty choice and/or re-offending. These variables include age, gender, race, type and seriousness of offence, number of concurrent offences, length of criminal record and nature of prior convictions (Nagin 2009). As such, we included a wide range of potential covariates in the propensity score models, including demographic characteristics, characteristics of the index court appearance, prior convictions and penalties received, and LSI-R assessment scores (in a supplementary analysis of ICOs versus supervised suspended sentences).

Variables included in the propensity score models were also considered for inclusion in the analyses of the re-offending outcome, along with any concurrent penalties received at the index court finalisation. The effect of accounting for the length of the principal penalty was also examined. As the concurrent penalties received and the length of the principal penalty may have been influenced by the penalty of interest (ICOs versus periodic detention and supervised suspended sentences) they were not included in the propensity score models, but were considered for inclusion in the re-offending models.

The variables included in the propensity score models, and those considered for inclusion in the re-offending models, are described in more detail below.

Demographic characteristics

The demographic variables included were:

- Sex: whether the offender was male or female.
- Indigenous status at index: whether the offender was identified as being of Aboriginal or Torres Strait Islander descent, or both, at their index court appearance.
- Indigenous status, ever: whether the offender had ever been identified as being of Aboriginal or Torres Strait Islander descent, or both, at any appearance in ROD.
- Age: age of the offender at the time of the index court appearance, categorised as 18-20 years, 21-24 years, 25-29 years, 30-34 years, 35-39 years, 40-44 years and 45 years and over.
- Remoteness of residence: based on applying the Accessibility Remoteness Index of Australia (ARIA+; Australian Bureau of Statistics, 2001) postcode-to-ARIA+ concordance table to the postcode in which the offender lived at the time of their index court appearance, with areas categorised as major cities (0.00-0.20), inner regional (0.21-2.40), outer regional (2.41-

- 5.92), remote (5.921- 10.53), and very remote (10.531-15.00). Due to low numbers, outer regional, remote and very remote categories were combined into one category.
- Socio-Economic Index for Areas (ABS, 2011b) disadvantage score of residence: the residential postcodes of offenders were ranked according to a range of aggregate-level factors such as average income and unemployment, and grouped in quintiles.

Characteristics of index court finalisation

The following variables related to the index court appearance were included in the propensity score models and considered for inclusion when adjusting for covariates in the re-offending model:

- Month of index court finalisation: The date of the index court finalisation, grouped into 3-monthly periods, and numbered from the beginning of the accrual period for the sample (e.g., for ICOs and supervised suspended sentences, October to December 2010, January to March 2011, etc. through to July to September 2012).
- Jurisdiction: The jurisdiction in which the offender's index court appearance was finalised, Local Court or Higher Court (District/Supreme).
- Plea: the plea relating to the principal offence (guilty, not guilty, other).
- Concurrent offences: the number of proven concurrent offences at the index court appearance, ranging from 1 to 6 or more.
- Index offence types: classified according to the Australian and New Zealand Standard Offence Classification (ANZSOC; Australian Bureau of Statistics (ABS), 2011a) and classified (yes/no) according to whether any proven offence at the index court appearance was a/an:
 - Serious violent offence (ANZSOC division 01, groups 0211, 0212, 0611, 0612)
 - ♦ Act intended to cause injury (ANZSOC division 02)
 - Dangerous or negligent act endangering persons (ANZSOC division 04)
 - ♦ Break and enter offence (ANZSOC division 07)
 - ♦ Theft offence (ANZSOC division 08)
 - ♦ Fraud offence (ANZSOC division 09)
 - ♦ Illicit drug offence (ANZSOC division 10)
 - ♦ Property damage offence (ANZSOC division 12)
 - → Public order offence (ANZSOC division 13)
 - ♦ Traffic offence (ANZSOC division 14)
 - Drive while licence disqualified or suspended (ANZSOC group 1411)
 - Exceed the prescribed content of alcohol or other substance limit (ANZSOC group 1431)
 - → Justice procedure offence (ANZSOC division 15)
 - Breach of custodial order offence (ANZSOC group 151)
 - Breach of community-based order (ANZSOC

subdivision 152)

- Breach of violence order (ANZSOC subdivision 1531).
- Domestic violence offence: whether any proven offence at the index court appearance was domestic violence related, according to the Crimes (Domestic and Personal Violence) Act 2007.⁵
- Severity of index offence: whether any proven offence at the index court appearance was (yes/no):
 - ♦ Strictly indictable
 - ♦ Indictable.

The following variables related to the index court finalisation were considered for inclusion in the re-offending models:

- Penalties at index court finalisation: whether the following penalties were received at the index court finalisation, in addition to the principal penalty of interest (yes/no):

 - ♦ Community service order
 - ♦Bond
 - ♦ Fine
 - ♦ Driver's licence disqualification
 - ♦ Payment of compensation/reparation
 - ♦ Nominal sentence.
- Length of principal penalty: in months, as recorded at the index court finalisation.

Criminal history

The following variables relating to the offender's criminal history were included in the propensity score models and considered for inclusion in the re-offending models:

- Court appearances with proven offences in prior 10 years: the number of court appearances with proven offences in the 10 years prior to the index court appearance, ranging from 0 to 10+.
- Court appearances with proven offences in prior 5 years: the number of court appearances with proven offences in the 5 years prior to the index court appearance, ranging from 0 to
- Prior offence types: whether any proven offence in the 5 years prior to the index court appearance was a/an (yes/no):
 - ♦ Serious violent offence (ANZSOC division 01, groups 0211, 0212, 0611, 0612)
 - ♦ Act intended to cause injury (ANZSOC division 02)

 - ♦Break and enter offence (ANZSOC division 07)
 - ♦ Theft offence (ANZSOC division 08)
 - ♦ Fraud offence (ANZSOC division 09)
 - ♦ Illicit drug offence (ANZSOC division 10)
 - ♦ Property damage offence (ANZSOC division 12)

- ♦ Public order offence (ANZSOC division 13)
- ♦ Traffic offence (ANZSOC division 14)
 - Drive while licence disqualified or suspended (ANZSOC group 1411)
- Exceed the prescribed content of alcohol or other substance limit (ANZSOC group 1431)
- - Breach of suspended sentence (ANZSOC group 1513)
 - Breach of community-based order (ANZSOC subdivision 152)
 - Breach of violence order (ANZSOC group 1531).
- Severity of prior offences: whether any proven offence in the 5 years prior to the index court appearance was (yes/no):
 - ♦ Strictly indictable
 - ♦ Indictable.
- Prior penalty types: whether in the 10 years prior to the index appearance the following penalties were received at a finalised court appearance (yes/no):
 - ♦ Imprisonment
 - ♦ Home detention
 - ♦ Periodic detention
 - ♦ Intensive correction order
 - ♦ Suspended sentence

 - ♦Bond
 - ♦ Driver's licence disqualification.

LSI-R data

Offenders with an LSI-R assessment within 12 months prior to and 3 months post their index court appearance were included in a supplementary analysis of ICOs compared to supervised suspended sentences.⁶ This comparison included the following LSI-R data when propensity score matching (along with the other variables previously described):

- Overall score: scale of 0 to 54, where low overall scores indicate a low probability of committing future offences and higher scores indicate a higher probability of committing future offences.
- Risk level category: low, low-medium, medium, mediumhigh, high.
- ♦ Domain scores: scores on each of the ten domains criminal history (0-10), education/employment (0-10), financial (0-2), family/marital (0-4), accommodation (0-3), leisure/recreation (0-2), companions (0-4), alcohol/drug problems (0-9), emotional/personal (0-5) and attitudes/ orientation (0-4);
- ♦ Time (in days) from the date of the LSI-R assessment to the index court finalisation.

STATISTICAL ANALYSES

Propensity score matching

For each of the penalty comparisons (ICOs versus periodic detention and ICOs versus supervised suspended sentences), propensity score matching was used to identify pairs of individuals who were equally likely to have received an ICO, one of whom did receive an ICO and one of whom received periodic detention or a supervised suspended sentence.

Propensity score matching was conducted in StataMP/12 using the module psmatch2. Propensity scores, representing the predicted probability of receiving an ICO, were obtained from logistic regression models that included the listed explanatory variables. Offenders who had propensity scores within .05 units of each other were considered to be potential matches. One-to-one nearest neighbour matching without replacement was used. The logistic regression models for each of the penalty comparisons are included in Table A1 of the Appendix.

For each of the comparisons, the numbers of offenders in the samples (after applying sample selection criteria) that were matched and unmatched were examined across the distribution of propensity scores. These figures are included in the Appendix as Figures A1 to A3. The balance on each of the explanatory variables was assessed before and after matching with Rosenbaum and Rubin's (1985) standardised bias. Standardised bias values for the matched and unmatched samples are presented in Table A2. After matching, all variables included in the propensity score models had a standardised bias less than 10, indicating good balance across the samples for the variable of interest. Variables relating to concurrent penalties received at the index finalisation and the length of the principal penalty were not balanced after matching, suggesting the need to consider them when examining the re-offending outcome.

Matched samples

Of the 1,076 offenders who received an ICO between 1 October 2010 and 30 September 2012 and were eligible for inclusion in the comparison with those who received periodic detention, 993 (92.3%) were matched to an offender who received periodic detention between 1 October 2007 and 30 September 2009.

Of the 1,097 offenders who received an ICO between 1 October 2010 and 30 September 2012 and were eligible for inclusion in the comparison with those who received supervised suspended sentences, 1,058 (96.4%) were matched to an offender who received a supervised suspended sentence between 1 October 2010 and 30 September 2012.

In relation to the supplementary analysis that included LSI-R assessment data in the propensity score models, of the 1,028 offenders who received an ICO between 1 October 2010 and 30 September 2012, met the eligibility criteria and had a relevant LSI-R assessment, 902 (87.7%) were matched to a comparable offender who received a supervised suspended sentence, met the eligibility criteria and had a relevant LSI-R assessment available.

Presented in Table A3 of the Appendix are the demographic, index court appearance, offence and criminal history characteristics of those who received ICOs, before and after applying eligibility criteria and matching to those who received periodic detention and supervised suspended sentence samples. The purpose of this table is to enable the resulting ICO samples to be compared in terms of their characteristics (i.e., whether those included in the matched samples were representative of those who received ICOs over the first 24 months following their introduction).

The most notable difference between those included in the ICO samples for comparison with periodic detention and those who received ICOs between 1 October 2010 and 30 September 2012 more generally was the proportion who had been given a sentence of imprisonment in the 10 years prior to their index appearance (6.3% in matched sample vs. 23.7% overall). This difference was due to the study eligibility criteria that excluded those with full-time sentences of imprisonment of 6 months or more (within the 10 years prior to the index court appearance) from the comparison of ICOs and periodic detention.7 Other differences could be seen in terms of the proportion who had received a suspended sentence in the 10 years prior to the index appearance (29.9% in the matched sample vs. 38.9% overall) and those who had prior indictable offences (44.2% in the matched sample vs. 52.1% overall). The ICO sample included in the periodic detention comparison and the overall sample were otherwise guite similar in terms of their characteristics.

The profiles of those who received ICOs and were included in the comparisons with supervised suspended sentences tended to be similar to those who received ICOs between 1 October 2010 and 30 September 2012 overall. However, a greater proportion of those in the matched sample pleaded guilty (87.5% in the matched sample vs. 79.3% overall). Further, fewer had offences against justice procedures (19.9% in the matched sample vs. 32.2% overall), and fewer had prior suspended sentences in the 10 years prior to the index appearance (26.1% in the matched sample vs. 38.9% in the overall sample). These differences were most likely due to the exclusion of those who had a breach of a suspended sentence at the index finalisation from the comparison of ICOs with supervised suspended sentences.

Modelling re-offending outcomes

The cumulative hazard rate of re-offending was estimated using the Nelson-Aalen estimator and compared between groups using Cox proportional hazards regression. These 'survival' methods account for differences in lengths of follow-up. For a re-offence to be counted it must have occurred prior to the earliest of the following dates, at which observations were censored:

- 1. start date of custodial episode (regardless of whether on remand or sentenced):
- 2. date of first subsequent finalised court appearance for a proven offence that occurred prior to the index appearance; 8
- 3. date of death;

- 4. (a) 31 December 2012 for those who received sentences of ICOs and supervised suspended sentences at their index appearances; or
 - (b) 31 December 2009 for those who received periodic detention at their index appearance.

The primary focus of the re-offending analyses was on comparing the time to re-offence for those who received ICOs with those who received periodic detention prior to the introduction of ICOs, and with those who received a supervised suspended sentence since the introduction of ICOs. These comparisons were made using the matched samples, identified after applying selection criteria and propensity score matching methods. Cumulative re-offending rates over time and at 12 months from the index finalisation were estimated. The effect of ICOs on re-offending was examined using Cox proportional hazards regression, with and without adjustment for other covariates, including the length of the sentence. To obtain robust estimates that accounted for the matched nature of the data, the vce(cluster) option in Stata was used.

RESULTS

RE-OFFENDING FOLLOWING A PRINCIPAL PENALTY OF AN ICO

Presented in Figure 3 is the cumulative rate of re-offending

Figure 3. Cumulative re-offending rate (with 95% confidence intervals) following a court finalisation between 1 October 2010 and 30 September 2012 where an intensive correction order was received as a principal penalty (N=1,354)

Proportion re-offended 0.50 0.45 0.40 0.35 0.30 0.25 0.20 0.15 0.10 0.05 0.00 12 18 24 30 Time from index finalisation (months) Number at risk 1,354 951 501 204 34

following an ICO between 1 October 2010 and 30 September 2012, prior to applying selection criteria and propensity score matching methods. As can be seen, 12 months after receiving an ICO, approximately 20 per cent of offenders were estimated to have re-offended (95% confidence interval (17.6, 23.6)); 18 months from the index appearance, 29 per cent of offenders were estimated to have re-offended (95% confidence interval (25.2, 34.2)).

INTENSIVE CORRECTION ORDERS VERSUS PERIODIC DETENTION

Presented in Figure 4 are the cumulative rates of re-offending for the matched ICO and periodic detention samples. Also included in Figure A4 of the Appendix are rates for those who were not included in the matched samples (due to being ineligible as per Figure 1 and/or unmatched). The curves presented in Figure 4 suggest a difference in re-offending between the ICO and periodic detention groups over time.

As shown, 12 months from the index finalisation, 18 per cent of those who received an ICO and 26 per cent of those who received periodic detention were estimated to have re-offended. From the time of the index finalisation an offender on an ICO had around 30 per cent less risk of re-offending than an offender on periodic detention (Table 3). Even after accounting for the length of penalty, there was a significant difference between the

Figure 4. Cumulative re-offending rates following a court finalisation for matched samples of offenders who received an intensive correction order as a principal penalty (1 October 2010 – 30 September 2012) or periodic detention as a principal penalty (1 October 2007 – 30 September 2009)

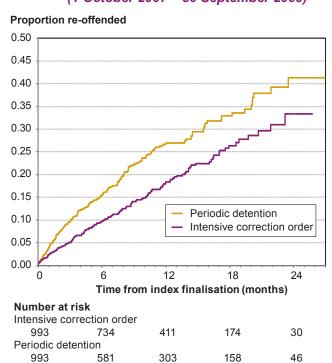


Table 2. Time from index finalisation to first re-offence, intensive correction orders (1 October 2010 – 30 September 2012) versus periodic detention (1 October 2007 – 30 September 2009)

	Intensive correction order	Periodic detention
Number of offenders	993	993
Number re-offended	161	197
Estimate of 12-month re-offending rate, per cent	17.9	26.6
(95% confidence interval)	(15.0, 21.4)	(22.7, 31.2)
Hazard ratio, unadjusted	0.7	1
(95% confidence interval)	(0.57, 0.86)	
<i>p</i> -value	0.001	
Hazard ratio, adjusted for other covariates	0.67	1
(95% confidence interval)	(0.55, 0.83)	
<i>p</i> -value	<.001	
Hazard ratio, adjusted for other covariates and length of penalty	0.78	1
(95% confidence interval)	(0.63, 0.98)	
<i>p</i> -value	0.032	

Note. Of those who received periodic detention, 8.8 per cent were censored due to a subsequent custodial episode and 9.5 per cent were censored due to a penalty received for a breach or for an offence that occurred prior to the index appearance. Of those who received an intensive correction order, 4.6 per cent were censored due to a subsequent custodial episode and 5.7 per cent were censored due to receiving a penalty for a breach or an offence that occurred prior to the index appearance.

Table 3. Time to first re-offence, intensive correction orders (ICOs) versus supervised suspended sentences (1 October 2010 – 30 September 2012)

	Intensive correction order	Supervised suspended sentence
Number of offenders	1,058	1,058
Number re-offended	174	234
Estimate of 12-month re-offending rate, per cent	18.6	28.7
(95% confidence interval)	(15.7, 22.1)	(24.8, 33.2)
Hazard ratio, unadjusted	0.67	1.00
(95% confidence interval)	(0.55, 0.81)	
<i>p</i> -value	<.001	
Hazard ratio, adjusted for other covariates	0.64	1.00
(95% confidence interval)	(0.53, 0.78)	
<i>p</i> -value	<.001	
Hazard ratio, adjusted for other covariates and length of penalty	0.65	1.00
(95% confidence interval)	(0.53, 0.79)	
<i>p</i> -value	<.001	

Note. Of those who received a supervised suspended sentence, 4.0 per cent were censored due to a subsequent custodial episode and 8.8 per cent were censored due to a penalty received for a breach or for an offence that occurred prior to the index appearance. Of those who received an intensive correction order, 5.5 per cent were censored due to a subsequent custodial episode and 6.0 per cent were censored due to receiving a penalty for a breach or for an offence that occurred prior to the index appearance.

risk of re-offending of those who received an ICO and those who received periodic detention.

Table 3. Time from index finalisation to first re-offence, intensive correction orders (1 October 2010-30 September 2012) versus periodic detention (1 October 2007-30 September 2009)

Note. Of those who received periodic detention, 8.8 per cent were censored due to a subsequent custodial episode and 9.5 per cent were censored due to a penalty received for a breach or for an offence that occurred prior to the index appearance. Of those who received an intensive correction order, 4.6 per cent were censored due to a subsequent custodial episode and 5.7

per cent were censored due to receiving a penalty for a breach or an offence that occurred prior to the index appearance.

ICOS VERSUS SUPERVISED SUSPENDED SENTENCES

Presented in Figure 5 are the cumulative rates of re-offending for the matched ICO and supervised suspended sentence samples. Also included in Figure A5 of the Appendix are rates for those who were not included in the matched samples (due to being ineligible as per Figure 2 and/or unmatched). The curves presented in Figure 5 suggest a difference in re-offending between the ICO and supervised suspended sentence groups over time.

As shown, 12 months from the index finalisation, 19 per cent of those who received an ICO and 29 per cent of those who received a supervised suspended sentence were estimated to have re-offended. From the time of the index finalisation an offender on an ICO had around 33 per cent less risk of re-offending than an offender on a supervised suspended sentence (Table 4).

Note. Of those who received a supervised suspended sentence, 4.0 per cent were censored due to a subsequent custodial episode and 8.8 per cent were censored due to a penalty received for a breach or for an offence that occurred prior to the index appearance. Of those who received an intensive correction order, 5.5 per cent were censored due to a subsequent custodial episode and 6.0 per cent were censored due to receiving a

Figure 5. Cumulative re-offending rates following a court finalisation for matched samples of offenders who received an intensive correction order or supervised suspended sentence as a principal penalty (1 October 2010 – 30 September 2012) Proportion re-offended 0.55 0.50 0.45 0.40 0.35 0.30 0.25 0.20 0.15 0.10 Supervised suspended sentence 0.05 Intensive correction order 0.00 6 18 Time from index finalisation (months) Number at risk Intensive correction order

334

417

153

168

40

27

Table 4. Time to first re-offence, intensive correction orders versus supervised suspended sentences (1 October 2010 – 30 September 2012), accounting for LSI-R assessment scores

1,058

1.058

656

764

Supervised suspended sentence

	Intensive correction order	Supervised suspended sentenc	
Number of offenders	902	902	
Number re-offended	152	175	
Estimate of 12-month re-offending rate, per cent	19	22.9	
(95% confidence interval)	(15.8, 22.8)	(19.4, 27.2)	
Hazard ratio, unadjusted	0.82	1	
(95% confidence interval)	(0.66, 1.02)		
<i>p</i> -value	0.081		
Hazard ratio, adjusted for other covariates	0.76	1	
(95% confidence interval)	(0.56, 1.03)		
<i>p</i> -value	0.073		
Hazard ratio, adjusted for other covariates and length of penalty	0.77	1	
(95% confidence interval)	(0.57, 1.04)		
<i>p</i> -value	0.087		

Note. Of those who received a supervised suspended sentence, 4.0 per cent were censored due to a subsequent custodial episode and 9.4 per cent were censored due to a penalty received for a breach or for an offence that occurred prior to the index finalisation. Of those who received an intensive correction order, 5.8 per cent were censored due to a subsequent custodial episode and 6.1 per cent were censored due to receiving a penalty for a breach or for an offence that occurred prior to the index finalisation.

penalty for a breach or for an offence that occurred prior to the index appearance.

Accounting for LSI-R

As mentioned in the introduction, despite matching on a range of demographic and offending characteristics it remained possible that offenders who received ICOs were fundamentally different from offenders who received supervised suspended sentences, in ways not captured by the data. This was particularly likely given the suitability assessment associated with ICOs. As such, a supplementary analysis was undertaken in which LSI-R scores were taken into account.

The curves in Figure 6 suggest there was little difference between ICO and supervised suspended sentence samples after matching on LSI-R assessment scores (in addition to other demographic and offending characteristics).

No difference was found between matched groups in the time from index appearance to first re-offence, before or after adjustment for other covariates (Table 5).

Figure 6. Cumulative re-offending rates following a court finalisation for matched samples of offenders who received an intensive correction order or supervised suspended sentence as a principal penalty (1 October 2010 – 30 September 2012), accounting for LSI-R assessment scores

Proportion re-offended 0.55 0.50 0.45 0.40 0.35 0.30 0.25 0.20 0.15 0.10 Supervised suspended sentence 0.05 Intensive correction order 0.00 6 12 18 24 Time from index finalisation (month

	Time from maex mansation (months)						
Number at	risk						
Intensive co	rrection order						
902	646	357	149	24			
Supervised	suspended se	entence					
902	588	321	151	37			

DISCUSSION

The aim of this study was to examine the risk of re-offending following an ICO sentence. Two comparison groups were employed as counterfactuals. One consisted of offenders given a sentence of periodic detention prior to the introduction of ICOs. The other consisted of offenders given a suspended sentence with supervision after the introduction of ICOs. These comparison groups were chosen because these sanctions are also alternatives to imprisonment, and past research had shown considerable similarity between offenders given these sanctions and offenders given an ICO. All groups were carefully matched on a wide range of factors likely to have influenced penalty choice and/or re-offending.

Regardless of whether offenders receiving ICOs were compared with a matched sample of offenders receiving a sentence of periodic detention or a matched sample receiving a suspended sentence, lower rates of re-offending were observed for offenders receiving ICOs. Twelve months from the index finalisation, 26 per cent of those who received periodic detention but only 18 per cent of those who received an ICO had re-offended. From the time of the index finalisation an offender on an ICO had around 30 percent less risk of re-offending than an offender on periodic detention. Twelve months from the index finalisation 29 per cent of those who received a supervised suspended sentence but only 19 per cent of those who received an ICO had re-offended. From the time of the index finalisation an offender on an ICO had 33 per cent less risk of re-offending than an offender on a supervised suspended sentence.

Although these results appear to suggest that ICOs are more effective than periodic detention and suspended sentences, there is an important caveat surrounding this conclusion. In the case of the ICO-suspended sentence comparison, it was possible to match offenders on LSI-R variables as well as on demographic and offending variables. When matched on all variables, the difference between the two groups in re-offending rates ceased to be statistically significant. In the case of the ICO-periodic detention comparison, it was only possible to match offenders on demographic and offending variables. We do not know whether the lower rate of re-offending among offenders given ICOs compared with offenders given sentences of periodic detention would have disappeared or been attenuated, had it been possible to match the two groups in terms of their LSI-R scores.

These findings make it impossible to draw firm conclusions about the relative effectiveness of ICOs, compared with periodic detention and suspended sentences, in reducing re-offending. They also underscore the difficulties involved in evaluating correctional programs outside the context of a randomised controlled trial. Although PSM avoids some of the assumptions typically made in the context of conventional regression studies, it makes assumptions of its own. The most important of these assumptions is "strong ignorability" (see Shadish, 2012). Strong ignorability implies that that, conditional on the observed covariates, the allocation of cases to treatment and comparison

groups is random. When controls are extensive, it is possible to argue that this assumption has been met. The only way to be sure about this, however, is to actually randomise offenders into treatment and comparison groups.

The current study has highlighted one other point of importance to future evaluations of correctional programs. One of the external reviewers of this report requested we provide more information about the actual operation of the ICO program and, in particular, about the intensity, duration and type of treatment received by offenders on the program. Such information is of great importance in understanding the reasons for any observed difference, or absence of a difference, between treatment and comparison groups. It is also of great importance in determining how the ICO program could be made more effective. It is recommended that future evaluations of correctional programs include a process evaluation as a standard feature, complementing an outcome evaluation.

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NOTES

- 1 'Principal penalty' refers to the most serious penalty received at the court appearance, where 'most serious' is based on the type and quantum of the penalty. The classification of offenders according to the principal penalty they received was based on the original disposition – appeals were not taken into account. Thus, if an offender successfully appealed against a sentence of an ICO and instead received a suspended sentence, they would be classified as having received an ICO.
- 2 For simplicity, all finalised court appearances relating to sexual assault offences (ANZSOC groups 311, 312) and nonassaultive sexual offences against a child (ANZSOC group 321) were excluded. As a consequence, some offenders who had not committed a prescribed sexual offence may have been excluded.
- 3 Those who breached a suspended sentence were unlikely to receive another suspended sentence.
- 4 There are numerous reasons why breaches have not been counted as re-offences. For example, breaches are subject to policing/surveillance effects. Further, breaches of some custodial and community-based orders may not always be recorded, particularly if the matter was dealt with in a Higher Court as breaches are not in the scope of the Higher Court collection. Where recorded, breaches of court orders are included as a new action on the original offence record. Consequently, the offence date on the breach record is that of the offence which led to the original court order, rather than the actual date the order was breached.
- 5 As the Crimes (Domestic and Personal Violence) Act 2007 came into effect in 2008, this variable could not be included in

- the comparison of ICOs with periodic detention.
- 6 There was no policy requirement for the LSI-R assessment of offenders on periodic detention. LSI-R data were only available for 55 per cent of those who received periodic detention. As such, a sub-analysis comparing ICOs and periodic detention in those with LSI-R scores was not undertaken. LSI-R data were available for 82 per cent of those who received a supervised suspended sentence.
- 7 This criterion was applied as those with previous sentences of full-time imprisonment of 6 months or more were ineligible to receive periodic detention.
- 8 Where an offender was convicted after the index finalisation for an offence that occurred prior to the index finalisation, the penalty received may have altered the offender's propensity to re-offend.

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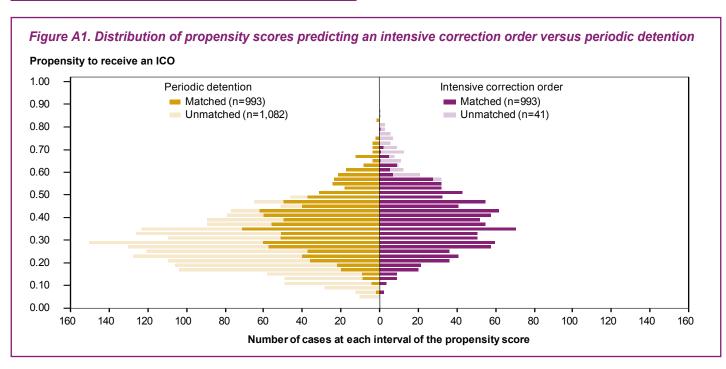
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APPENDIX



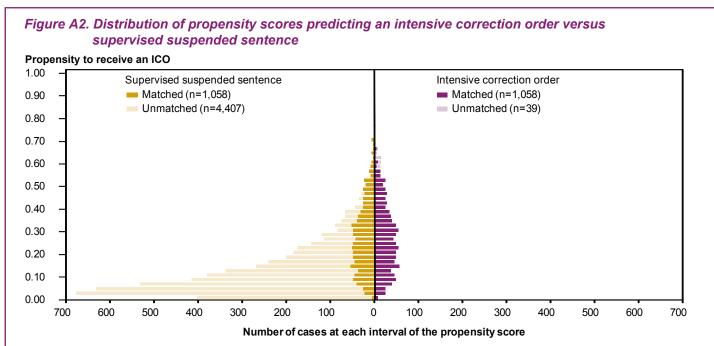


Figure A3. Distribution of propensity scores predicting an intensive correction order versus supervised suspended sentence, for the supplementary analysis with LSI-R assessment scores included in the propensity score model

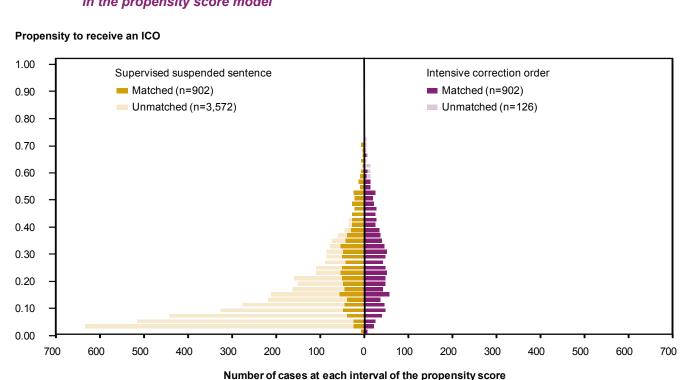
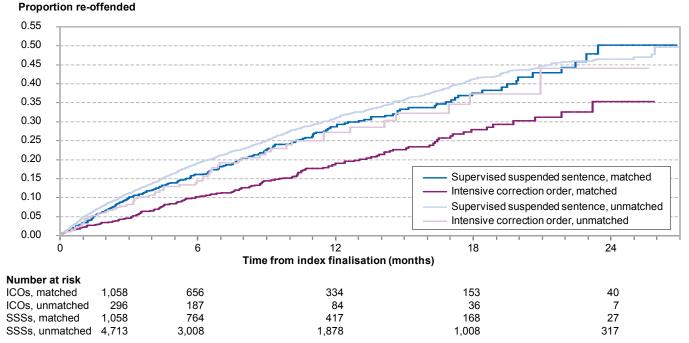


Figure A4. Cumulative re-offending rates following a court finalisation for offenders who received an intensive correction orders (ICO) as a principal penalty (1 October 2010 – 30 September 2012) or periodic detention (PD) as a principal penalty (1 October 2007 - 30 September 2009) Proportion re-offended 0.55 0.50 0.45 0.40 0.35 0.30 0.25 0.20 0.15 Periodic detention, unmatched Intensive correction order, unmatched 0.10 Periodic detention, matched 0.05 Intensive correction order, matched 0.00 6 12 18 24 Time from index finalisation (months) Number at risk ICO, matched 993 734 411 174 30 ICO, unmatched 361 217 90 30 PD, matched 303 158 46 993 581 PD, unmatched 1,365 802 480 261

Note. Prior to adjusting for other covariates there was a significant difference between ICOs matched and the other groups (e.g., hazard ratio for unmatched ICOs vs. matched ICOs = 1.49 (95% CI (1.13, 1.96), p=.005)). After adjustment for covariates (such as prior penalties) there was no longer a significant difference

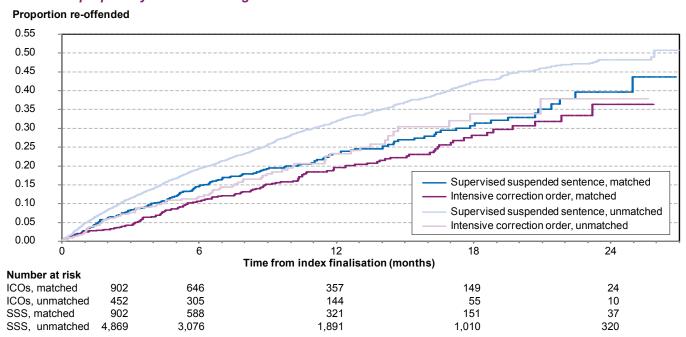
between matched and unmatched ICOs.

Figure A5. Cumulative re-offending rates following a court finalisation for offenders who received an intensive correction orders (ICO) or a supervised suspended sentence as a principal penalty (1 October 2010 – 30 September 2012)



Note. Prior to adjusting for other covariates there was a significant difference between ICOs matched and the other groups (e.g., hazard ratio for unmatched ICOs vs. matched ICOs = 1.40 (95% CI (1.04, 1.87), p=.025)). After adjustment for covariates (such as prior penalties) there was no longer a significant difference between matched and unmatched ICOs.

Figure A6. Cumulative re-offending rates following a court finalisation for offenders who received an intensive correction orders (ICO) or a supervised suspended sentence as a principal penalty (1 October 2010 – 30 September 2012), where LSI-R assessment scores were included in the propensity score matching model



Note. Prior to adjusting for other covariates there was a significant difference between the matched intensive correction order and the unmatched supervised suspended sentence groups (e.g., hazard ratio for unmatched SSSs vs. matched ICOs = 1.63 (95% CI (1.37, 1.92), p<.001)). This difference remained after adjustment for other covariates.

Table A1. Logistic regression models predicting an intensive correction order versus periodic detention, and an intensive correction order versus a supervised suspended sentence

		ICO vs Perio	dic	ICO vs Superv		ICO vs Superv suspended ser (supplementary LSI-R)	ntence
		Odds ratio (95% confidence interval)	<i>p</i> -value	Odds ratio (95% confidence interval)	<i>p</i> -value	Odds ratio (95% confidence interval)	<i>p</i> -value
Demographic characteristics							
Gender	Female vs male	1.36 (1.02, 1.80)	0.035	0.48 (0.38, 0.62)	<.001	0.74 (0.57, 0.97)	0.031
Indigenous status	Indigenous at index vs other	1.22 (0.78, 1.90)	0.381	1.01 (0.77, 1.32)	0.964	1.14 (0.85, 1.53)	
	Indigenous ever vs other	1.03 (0.74, 1.43)	0.868	0.72 (0.50, 1.03)	0.075	0.73 (0.49, 1.09)	0.124
Age	21-24 vs other	0.92 (0.68, 1.25)	0.585	1.14 (0.85, 1.53)	0.374	1.24 (0.90, 1.70)	0.192
	25-29 vs other	0.71 (0.51, 0.98)	0.040	0.95 (0.70, 1.30)	0.768	1.04 (0.74, 1.46)	0.803
	30-34 vs other	0.94 (0.67, 1.32)	0.729	0.87 (0.63, 1.19)	0.370	1.13 (0.79, 1.60)	0.512
	35-39 vs other	0.90 (0.64, 1.27)	0.559	1.01 (0.73, 1.38)	0.971	1.28 (0.90, 1.83)	0.176
	40-44 vs other	1.06 (0.73, 1.54)	0.747	0.82 (0.58, 1.14)	0.239	1.06 (0.72, 1.56)	0.772
	45+ vs other	0.79 (0.56, 1.12)	0.186	0.64 (0.46, 0.88)	0.007	0.85 (0.59, 1.22)	0.376
Remoteness/ARIA of residence	Major city	1.46 (0.35, 6.00)	0.601	1.84 (0.55, 6.17)	0.323	2.28 (0.64, 8.11)	0.204
	Inner regional	1.06 (0.25, 4.40)	0.938	1.12 (0.33, 3.80)	0.850	1.29 (0.36, 4.63)	0.698
	Outer regional/Remote/ Very remote	1.43 (0.34, 6.05)	0.626	0.51 (0.15, 1.75)	0.287	0.55 (0.15, 2.01)	0.368
SEIFA of residence	Quintile 1 vs other	0.90 (0.19, 4.29)	0.898	1.19 (0.33, 4.28)	0.785	0.70 (0.18, 2.72)	0.607
	Quintile 2 vs other	0.95 (0.20, 4.54)	0.953	1.93 (0.54, 6.92)	0.315	1.15 (0.29, 4.50)	0.839
	Quintile 3 vs other	0.83 (0.18, 3.93)	0.816	1.39 (0.39, 4.97)	0.608	0.74 (0.19, 2.85)	0.658
	Quintile 4 vs other	1.30 (0.28, 6.13)	0.738	1.90 (0.53, 6.76)	0.322	1.03 (0.27, 3.99)	0.963
	Quintile 5 vs other	1.35 (0.28, 6.43)	0.707	1.86 (0.52, 6.68)	0.341	0.96 (0.25, 3.75)	0.957
Index appearance							
Date of index appearance	3-monthly intervals, from beginning of sample accrual period	1.10 (1.06, 1.14)	<.001	1.18 (1.14, 1.22)	<.001	1.20 (1.15, 1.24)	<.001
Jurisdiction	Higher vs Local	0.72 (0.49, 1.05)	0.092	1.49 (1.03, 2.15)	0.036	1.10 (0.73, 1.66)	0.655
Plea to principal offence	Guilty vs other	0.60 (0.47, 0.75)	<.001	1.05 (0.84, 1.31)	0.661	1.16 (0.91, 1.49)	0.235
Number of concurrent offences	1-6+	1.05 (0.99, 1.12)	0.105	1.03 (0.97, 1.10)	0.288	1.05 (0.98, 1.12)	0.169
Type of offence/s	Serious violent vs other	0.88 (0.65, 1.20)	0.426	1.37 (1.07, 1.76)	0.013	1.40 (1.06, 1.84)	0.019
	Act intended to cause injury vs other	1.25 (0.89, 1.74)	0.193	0.83 (0.63, 1.10)	0.203	0.93 (0.68, 1.28)	0.662
	Dangerous or negligent act endangering persons vs other	1.16 (0.82, 1.66)	0.399	1.21 (0.88, 1.68)	0.247	1.17 (0.81, 1.67)	0.401
	Break and enter vs other	1.18 (0.78, 1.80)		0.73 (0.52, 1.03)		0.86 (0.59, 1.25)	
	Theft vs other	0.68 (0.49, 0.94)	0.020	0.56 (0.42, 0.74)	<.001	0.66 (0.48, 0.90)	0.008
	Fraud vs other	1.20 (0.83, 1.72)	0.336	2.43 (1.74, 3.41)	<.001	2.41 (1.65, 3.52)	<.001
	Drug vs other	1.14 (0.84, 1.54)		0.79 (0.61, 1.02)		0.87 (0.66, 1.16)	
	Property damage vs other	0.93 (0.66, 1.30)		0.75 (0.56, 1.02)		0.81 (0.58, 1.12)	
	Public order vs other	1.25 (0.92, 1.71)		1.04 (0.79, 1.36)	0.806	1.04 (0.76, 1.41)	0.812
	Traffic vs other	1.00 (0.69, 1.45)		0.84 (0.59, 1.20)	0.342	0.91 (0.62, 1.34)	0.628
	Drive while licence disqualified vs other	1.23 (0.88, 1.70)	0.223	1.79 (1.33, 2.42)	<.001	1.67 (1.20, 2.33)	0.002

Table A1. Logistic regression models predicting an intensive correction order versus periodic detention, and an intensive correction order versus a supervised suspended sentence

		ICO vs Period detention	dic	ICO vs Supervised suspended sentence		ICO vs Superv suspended sen (supplementary LSI-R)	ntence	
		Odds ratio (95% confidence interval)	p-value	Odds ratio (95% confidence interval)	<i>p</i> -value	Odds ratio (95% confidence interval)	<i>p</i> -value	
	Exceed the prescribed content of alcohol vs other	1.35 (0.98, 1.87)	0.070	0.95 (0.69, 1.29)	0.733	1.05 (0.74, 1.49)	0.771	
	Offences against justice procedures vs other	0.71 (0.51, 0.98)	0.040	0.94 (0.68, 1.31)	0.72	1.01 (0.71, 1.45)	0.937	
	Breach of suspended sentence vs other	2.01 (1.37, 2.96)	<.001					
	Breach of community-based order vs other	1.38 (0.98, 1.93)	0.065	0.47 (0.33, 0.66)	<.001	0.42 (0.28, 0.62)	<.001	
	Breach of violence order vs other	0.77 (0.51, 1.18)	0.231	0.87 (0.55, 1.35)	0.526	0.96 (0.59, 1.56)	0.860	
	Strictly indictable offence vs other	1.93 (1.24, 2.99)	0.004	0.86 (0.57, 1.31)	0.487	0.92 (0.58, 1.45)	0.715	
	Indictable offence vs other	1.53 (1.15, 2.05)	0.003	0.74 (0.57, 0.98)	0.034	0.82 (0.60, 1.11)	0.195	
	Domestic violence related offence vs other			0.66 (0.49, 0.90)	0.009	0.70 (0.50, 0.98)	0.036	
Criminal history								
Prior court appearances	Number of court appearances with proven offences in prior 10 years, 0-10+	0.99 (0.93, 1.06)	0.853	0.90 (0.85, 0.95)	0	0.93 (0.88, 1.00)	0.042	
	Number of court appearances with proven offences in prior 5 years, 0-5+	0.88 (0.78, 0.99)	0.029	0.99 (0.89, 1.10)	0.808	1.01 (0.90, 1.14)	0.815	
Penalties in prior 10 years	Imprisonment vs other	1.39 (0.99, 1.97)	0.059	1.12 (0.90, 1.40)	0.306	1.22 (0.94, 1.59)	0.129	
	Home/periodic detention vs other	1.21 (0.90, 1.64)	0.203	1.83 (1.42, 2.35)	<.001	1.80 (1.36, 2.38)	<.001	
	Suspended sentence vs other	1.40 (1.11, 1.78)	0.004	1.46 (1.20, 1.78)	<.001	1.45 (1.17, 1.81)	0.001	
	Community service order vs other	0.84 (0.68, 1.02)	0.082	1.42 (1.19, 1.71)	<.001	1.33 (1.09, 1.62)	0.005	
	Bond vs other	1.11 (0.90, 1.36)	0.328	0.93 (0.77, 1.11)	0.417	0.88 (0.72, 1.08)	0.213	
	Drivers licence disqualification vs other	1.10 (0.84, 1.45)	0.482	0.99 (0.79, 1.24)	0.939	0.88 (0.68, 1.13)	0.303	
	Fine vs other	1.18 (0.92, 1.52)	0.184	1.21 (0.96, 1.51)	0.101	1.25 (0.97, 1.61)	0.08	
	Bond without conviction vs other	1.18 (0.93, 1.51)	0.177	0.86 (0.68, 1.07)	0.178	0.83 (0.65, 1.07)	0.155	
	No conviction	1.03 (0.79, 1.34)	0.834	1.12 (0.88, 1.42)	0.365	1.23 (0.94, 1.60)	0.127	
Offences proven in prior 5 years	Serious violent vs other	0.71 (0.55, 0.91)	0.008	0.95 (0.76, 1.18)	0.641	1.07 (0.83, 1.37)	0.589	
	Act intended to cause injury vs other	1.02 (0.76, 1.37)	0.882	1.11 (0.87, 1.43)	0.394	1.03 (0.79, 1.36)	0.81	
	Dangerous or negligent act endangering persons vs other	0.88 (0.64, 1.21)	0.432	0.94 (0.70, 1.27)	0.702	0.88 (0.64, 1.22)	0.44	
	Break and enter vs other	0.79 (0.51, 1.23)	0.297	0.90 (0.64, 1.27)	0.557	0.96 (0.66, 1.40)	0.842	
	Theft vs other	0.71 (0.54, 0.93)	0.014	0.85 (0.67, 1.08)	0.176	0.84 (0.64, 1.09)	0.18	
	Fraud vs other	0.70 (0.50, 0.99)	0.044	1.36 (0.99, 1.86)	0.056	1.27 (0.89, 1.81)	0.187	
	Drug vs other	1.37 (1.05, 1.78)	0.019	0.89 (0.71, 1.11)	0.289	0.96 (0.75, 1.23)	0.735	
	Property damage vs other	0.95 (0.73, 1.22)	0.668	0.96 (0.77, 1.20)	0.734	1.05 (0.82, 1.34)	0.717	
	Public order vs other	0.75 (0.58, 0.96)	0.025	0.85 (0.68, 1.05)	0.137	0.87 (0.69, 1.11)	0.266	
	Traffic vs other	0.75 (0.56, 1.02)	0.064	0.92 (0.70, 1.20)	0.543	0.86 (0.63, 1.15)	0.307	
	Drive while licence disqualified vs other	1.11 (0.85, 1.44)	0.457	1.26 (0.98, 1.60)	0.066	1.37 (1.05, 1.80)	0.021	

Table A1. Logistic regression models predicting an intensive correction order versus periodic detention, and an intensive correction order versus a supervised suspended sentence

		ICO vs Period detention	ic	ICO vs Supervised suspended sentence		ICO vs Superv suspended sen (supplementary LSI-R)	tence
		Odds ratio (95% confidence interval)	-value	Odds ratio (95% confidence interval)	<i>p</i> -value	Odds ratio (95% confidence interval)	p-value
	Exceed the prescribed content of alcohol vs other	1.15 (0.88, 1.50)	0.301	1.11 (0.86, 1.43)	0.412	1.17 (0.89, 1.55)	0.265
	Offences against justice procedures vs other	1.18 (0.87, 1.60)	0.29	1.13 (0.87, 1.46)	0.354	1.13 (0.85, 1.50)	0.387
	Breach of custodial order offence vs other	2.10 (1.13, 3.88)	0.019	0.98 (0.67, 1.43)	0.922	0.77 (0.50, 1.17)	0.213
	Breach of community-based order vs other	1.54 (1.13, 2.09)	0.006	0.82 (0.63, 1.06)	0.134	0.75 (0.56, 1.00)	0.051
	Breach of violence order vs other	0.90 (0.64, 1.26)	0.533	0.99 (0.74, 1.31)	0.934	1.01 (0.73, 1.39)	0.957
	Strictly indictable offence vs other	1.36 (0.78, 2.37)	0.283	1.13 (0.75, 1.71)	0.558	0.95 (0.60, 1.49)	0.822
	Indictable offence vs other	1.13 (0.85, 1.50)	0.416	0.88 (0.68, 1.13)	0.305	0.90 (0.68, 1.19)	0.468
LSI-R							
Days from assessment to index finalisation						1.01 (1.00, 1.01)	<.001
Overall score (0-54)						0.98 (0.92, 1.04)	0.508
Risk category	Medium-low vs Low					0.90 (0.66, 1.23)	0.504
	Medium vs Low					0.68 (0.39, 1.18)	0.17
	Medium-high/High vs Low					1.00 (0.44, 2.27)	0.992
Domain scores	Education/employment (0-10)					1.04 (0.97, 1.12)	0.304
	Financial (0-2)					0.79 (0.69, 0.91)	0.001
	Family/marital(0-4)					0.87 (0.78, 0.96)	0.006
	Accommodation (0-3)					0.79 (0.69, 0.91)	0.001
	Leisure/recreation (0-2)					0.95 (0.84, 1.07)	0.367
	Companions (0-4)					1.09 (0.97, 1.21)	0.138
	Alcohol/drug problems (0-9)					0.98 (0.90, 1.05)	0.533
	Emotional/personal (0-5)					0.84 (0.78, 0.92)	<.001
	Attitudes/orientation (0-4)					1.04 (0.94, 1.14)	0.472

Table A2. Standardised bias before and after matching those who received intensive correction orders with those who received periodic detention and supervised suspended sentences

		ICOs vs Periodic detention		ICOs vs Su susper senter	nded	ICOs vs Supervis suspended senter (supplementary	
		Unmatched	Matched	Unmatched	Matched	Unmatched	Matched
Gender	Male vs female	6.8	-2.5	-20.8	-0.3	-19.2	-5.7
Indigenous status	Indigenous at index vs other	4.7	-2.9	-31.6	-3.3	-32.2	-2.5
	Indigenous, ever vs other	1.6	-5.1	-33.5	-2.7	-30.5	-0.6
Age	continuous	4.8	-1.3	-3.6	2.6	-3.4	-0.8
	18-20 years	-1.5	4.4	0.7	0.0	0.0	0.0
	21-24 years	-3.2	-1.0	3.8	-3.1	3.2	-0.9
	25-29 years	-6.1	0.0	0.0	-1.5	0.4	1.2
	30-34 years	4.6	-0.6	-3.4	-1.5	-2.5	1.2
	35-39 years	1.6	-3.2	3.3	3.4	3.3	-1.8
	40-44 years	7.3	-1.4	-0.8	-1.8	-0.4	-2.1
	45+ years	-0.8	2.1	-3.7	4.6	-4.1	2.2
ARIA of residence	Score	-4.0	-3.6	-53.0	-4.5	-53.6	-7.6
	Major city	11.9	2.8	45.7	0.4	45.4	2.1
	Inner regional	-13.6	-2.3	-6.8	-2.9	-7.4	-1.1
	Outer regional/Remote/Very remote	1.3	-2.4	-46.5	2.2	-47.4	-0.6
SEIFA of residence	Disadvantage score	15.4	3.0	28.0	-0.3	29.6	1.7
	Quintile 1	-4.7	-0.9	-15.7	2.4	-18.3	8.0
	Quintile 2	-4.0	-0.3	-2.9	-1.4	-2.6	0.3
	Quintile 3	-9.7	2.6	-6.9	0.9	-8.5	1.8
	Quintile 4	10.4	-0.8	18.0	-0.3	19.4	-4.8
	Quintile 5	12.7	-1.2	18.6	-2.4	19.2	2.1
Month of index appearance	3-monthly intervals, from beginning of sampling period	22.0	-0.7	31.0	-5.5	32.8	-0.5
Jurisdiction	Higher vs Local	3.0	-0.3	16.5	1.6	15.8	0.0
Plea to principal offence	Guilty vs other	-19.6	3.9	16.3	0.3	15.2	-0.3
Number of concurrent	continuous	7.5	-1.3	-2.1	0.9	-1.8	1.1
offences	1-6+	12.2	2.8	-17.2	-5.1	-17.7	1.6
Type of offence/s	Serious violent	1.0	0.3	-2.4	-5.4	-2.7	-5.5
	Acts intended to cause injury	4.1	-0.2	-26.3	-4.9	-25.8	-4.5
	Dangerous or negligent acts	7.6	3.6	12.7	3.5	12.7	3.7
	Break and enter	1.9	-1.5	-8.1	-1.6	-9.5	1.4
	Theft	-2.5	1.5	-19.9	0.0	-18.7	-0.7
	Fraud	4.0	-4.7	21.2	-1.9	21.8	-3.1
	Drug	9.1	1.9	-4.9	-2.0	-4.3	1.3
	Property damage	1.2	1.2	-22.4	-4.9	-21.3	0.0
	Public order	6.6	3.8	-9.3	0.0	-9.6	1.6
	Traffic	-5.4	0.0	28.7	3.5	28.3	0.0
	Drive while licence disqualified	-3.6	1.2	31.8	3.3	30.2	-2.8
	Exceed the prescribed content of alcohol	3.1	0.9	15.4	3.0	15.9	3.0
	Offences against justice procedures	4.3	-0.4	-41.2	2.1	-41.4	4.3
	Breach of suspended sentence	19.9	-0.9				
	Breach of community-based order	-0.7	-3.1	-37.8	1.7	-38.5	4.9
	Breach of violence order	-1.5	1.3	-26.9	1.0	-26.0	-2.8
	Domestic violence related offence			11.7	0.9	-34.0	-4.5
	Strictly indictable offence	8.0	-0.7	-25.7	-4.6	10.8	0.4
	Indictable offence	12.8	1.6	-34.4	-1.8	-25.2	0.0
Principal penalty*	Length of sentence	96.2	92.4	26.5	11.7	25.6	10.1
Other/concurrent	Suspended sentence	-18.2	-14.7				
penalties*	Community service order	-21.0	-19.5	-36.2	-39.5	-39.0	-47.4
	Bond	-4.5	-12.8	-41.8	-32.3	-41.8	-22.9
	Fine	-12.6	-12.7	-24.5	-27.1	-25.8	-27.6
	Driver licence disqualification	-4.2	2.1	29.6	5.9	29.2	1.7

Table A2. Standardised bias before and after matching those who received intensive correction orders with those who received periodic detention and supervised suspended sentences

		ICO vs Peri deten	iodic	ICOs vs Su suspe sentei	nded	ICOs vs Su suspended (supplem	sentences
		Unmatched	Matched	Unmatched	Matched	Unmatched	Matched
Prior court appearances	Number of appearances with proven offences in prior 10 years, 0-10+	-4.1	-1.4	-22.0	-3.5	-22.5	-0.3
	Number of appearances with proven offences in prior 5 years, 0-5+	-8.9	1.1	-22.2	-4.5	-22.7	1.5
Penalties in prior 10 years	Imprisonment	3.8	0.4	-13.6	-2.2	-13.4	3.1
	Home/periodic detention	3.1	-1.8	17.5	1.3	16.9	2.3
	Suspended sentence	16.3	0.0	1.3	0.2	0.1	0.0
	Community service order	-13.2	-2.2	10.2	8.0	9.9	-2.7
	Bond	0.9	1.0	-25.9	-4.4	-28.4	-2.3
	Fine	-4.3	0.7	12.3	-3.0	-8.5	-2.6
	Driver licence disqualification	-5.7	1.4	-7.5	-5.5	11.1	-0.4
	Bond without conviction	5.3	0.9	-5.5	0.0	-5.0	-2.4
	No conviction recorded	-1.1	-5.5	-0.3	-1.2	1.2	-3.2
Offences proven in prior	Serious violent	-4.6	3.2	-18.7	-6.8	-18.7	8.0
5 years	Acts intended to cause injury	0.0	1.1	-27.2	-5.2	-27.6	1.2
	Dangerous or negligent acts	-4.2	1.3	1.1	1.6	0.7	0.4
	Break and enter	-5.1	-1.0	-12.0	-1.5	-11.0	-1.3
	Theft	-8.5	-2.8	-20.2	-0.7	-20.4	3.4
	Fraud	-6.7	-3.9	3.5	-0.4	2.9	2.3
	Drug	6.5	-2.4	-14.8	-0.8	-14.7	2.4
	Property damage	-2.4	0.0	-22.2	-1.7	-21.7	-0.3
	Public order	-9.1	0.3	-23.8	-4.4	-24.0	-1.3
	Traffic	-10.6	2.0	10.3	-3.0	10.7	-0.7
	Drive while licence disqualified	-5.3	2.9	20.7	1.8	20.4	0.0
	Exceed the prescribed content of alcohol	-3.3	0.9	6.4	-1.3	6.8	1.0
	Offences against justice procedures	8.6	-0.2	-19.3	-2.2	-20.5	0.5
	Breach of custodial order offence	9.1	-0.8	-3.5	-1.3	-4.8	1.6
	Breach of community-based order	13.7	-2.9	-14.5	0.5	-16.3	3.1
	Breach of violence order	2.0	1.0	-17.6	-0.3	-18.6	3.0
	Strictly indictable offence	2.1	0.6	-2.5	-1.0	-2.9	-5.0
	Indictable offence	-1.3	0.0	-31.8	-1.5	-32.4	0.2
LSI_R assessment	Overall score					-66.9	2.8
	Low					49.0	-2.7
	Medium-Low					16.2	1.6
	Medium					-42.1	-0.2
	Medium-High/High					-29.9	1.5
	Criminal history (0-10)					-31.0	2.0
	Education/employment (0-10)					-41.7	3.4
	Financial (0-2)					-51.6	8.0
	Family/marital(0-4)					-52.8	3.5
	Accommodation (0-3)					-41.9	-1.5
	Leisure/recreation (0-2)					-38.1	2.6
	Companions (0-4)					-25.3	0.9
	Alcohol/drug problems (0-9)					-45.2	1.7
	Emotional/personal (0-5)					-42.2	2.2
	Attitudes/orientation (0-4)					-27.2	-3.1
	Days from assessment to index finalisatio	n				32.3	-2.7

^{*} Variables relating to the length of the principal penalty and concurrent penalties at the index finalisation were not included in propensity score matching.

Table A3. Demographic, offence and criminal history characteristics of offenders who received an intensive correction order (ICO) as a principal penalty before and after applying sample selection criteria and propensity score matching for comparisons with periodic detention (PD) and supervised suspended sentences (SSS)

	Before applying eligibility criteria	After applying eligibility criteria and matching			
	All (N=1,354)	ICOs vs PD (N=993)	ICOs vs SSS (N=1,058)	ICOs vs SSS with LSI-R (N=902)	
Demographic characteristics					
Sex					
Male	90.6	90.5	90.6	89.9	
Female	9.4	9.5	9.5	10.1	
Indigenous status					
Indigenous, at index appearance	7.5	5.8	6.5	6.9	
Indigenous, ever	15.3	12.3	14.6	15.1	
Age					
mean (years)	32.7	32.3	32.7	32.7	
18-20 years	9.5	11.3	10.3	10.9	
21-24 years	17.1	18.4	16.7	16.3	
25-29 years	17.2	17.0	16.9	16.6	
30-34 years	16.3	15.0	15.6	15.5	
35-39 years	15.5	13.8	16.1	16.3	
40-44 years	11.2	11.0	10.7	11.1	
45+ years	13.3	13.5	13.7	13.3	
Remoteness/ARIA of residence					
Major city	70.5	71.3	69.9	68.4	
Inner regional	17.4	17.7	17.2	17.7	
Outer regional	9.2	8.9	9.7	10.5	
Remote	0.2	0.1	0.2	0.2	
Very remote	0.4	0.3	0.4	0.4	
Missing/unknown	2.2	1.7	2.7	2.7	
SEIFA of residence	2.2	1.7	2.1	2.7	
Quintile 1	23.4	23.0	22.8	22.0	
Quintile 2	18.6	20.1	19.3	19.6	
Quintile 3	22.6	23.3	22.6	23.2	
Quintile 4	19.6	18.9	19.4	19.1	
Quintile 5	13.9	13.3	13.6	13.9	
Index appearance & offence/s	10.9	13.3	13.0	15.9	
Jurisdiction					
Local Court	86.0	83.4	82.8	82.5	
Higher Court	14.0	16.6	17.2	17.5	
Plea to principal offence	14.0	10.0	17.2	17.5	
	20.7	16.0	10 E	10.0	
Not guilty/No plea entered/ other	20.7	16.0	12.5	12.3	
Guilty	79.3	84.0	87.5	87.7	
Number of proven offences	2.2	2.0	2.0	2.4	
mean	3.2	3.2	3.0	3.1	
1	33.4	34.4	38.9	38.3	
2	25.1	25.7	25.0	24.5	
3	14.2	14.6	12.7	12.9	
4	9.6	9.7	8.6	9.1	
5	5.4	4.8	4.1	4.3	
6+	12.3	10.8	10.9	11.0	
Type of offence/s					
Serious violent	20.2	21.0	22.9	23.6	
Acts intended to cause injury	25.0	24.6	26.6	27.9	

Table A3. Demographic, offence and criminal history characteristics of offenders who received an intensive correction order (ICO) as a principal penalty before and after applying sample selection criteria and propensity score matching for comparisons with periodic detention (PD) and supervised suspended sentences (SSS)

	Before applying eligibility criteria All (N=1,354)	After applying eligibility criteria and matching		
		ICOs vs PD (N=993)	ICOs vs SSS (N=1,058)	ICOs vs SSS with LSI-R (N=902)
Sexual assault and related	1.0	1.0	1.0	1.0
Dangerous or negligent acts endangering persons	8.7	9.4	9.5	9.2
Abduction, harassment and other	2.0	1.6	1.8	1.8
Robbery, extortion and related	2.4	2.8	2.9	3.1
Break and enter	4.4	4.4	5.3	5.7
Theft and related	8.8	7.3	8.4	9.0
Fraud, deception and related	8.4	9.2	8.7	7.8
Illicit drug	11.4	11.7	12.7	13.2
Weapons	2.0	2.2	2.3	2.4
Property damage	6.9	6.8	6.2	6.8
Public order	8.7	7.8	8.2	8.2
Traffic and vehicle regulatory	38.5	38.1	38.2	36.6
Drive while licence disqualified	27.1	24.9	25.6	23.6
Exceed the prescribed content of alcohol	22.9	24.8	25.0	24.6
Offences against justice procedures	32.2	28.4	19.9	21.3
Breach of custodial order	16.5	11.6	0.3	0.3
Breach of suspended sentence	16.2	11.3	0.0	0.0
Breach of community-based order	14.0	12.7	12.0	13.0
Breach of violence order	5.8	5.7	5.2	5.8
Strictly indictable	9.8	11.7	12.5	13.2
Indictable	57.9	59.7	61.7	63.3
Domestic violence related	11.5	11.1	11.3	12.4
Length of principal penalty	11.0	11.1	11.5	12.4
mean	12.2	12.3	12.4	12.5
0 - 6 months	13.3	12.9	13.0	13.1
>6 - 12 months	55.0	55.0	54.3	53.7
>12 - 18 months	19.8	18.9	18.9	18.9
>18 - 24 months	11.9	13.2	13.9	14.4
Additional penalties	11.9	13.2	13.9	14.4
Suspended sentence	0.7	0.5	0.0	0.0
•				
Community service order	0.4	0.3	0.4	0.2
Bond	11.9 19.9	11.1	9.8	10.5 17.4
Fine		18.9	18.5	
Nominal sentence	8.2	7.2	8.0	8.7
Bond without conviction	0.2	0.0	0.2	0.2
No conviction recorded	0.1	0.1	0.1	0.1
Driver licence disqualification	38.8	39.2	39.3	37.6
Payment of compensation/reparation	8.0	9.8	9.3	10.1
Criminal history	4.4	0.4	0.0	0.7
Mean number of prior court appearances with proven offences in prior 10 years	4.1	3.1	3.6	3.7
Mean number of prior court appearances with proven offences in prior 5 years	2.4	2.0	2.1	2.1
Penalties received in 10 years prior to index appearance				
Imprisonment	23.7	6.3	22.7	23.5
Home detention	2.6	1.8	2.7	2.6
Periodic detention	9.4	7.3	8.9	7.8
Intensive correction order	2.9	0.0	0.0	0.0

Table A3. Demographic, offence and criminal history characteristics of offenders who received an intensive correction order (ICO) as a principal penalty before and after applying sample selection criteria and propensity score matching for comparisons with periodic detention (PD) and supervised suspended sentences (SSS)

	Before applying eligibility criteria All (N=1,354)	After applying eligibility criteria and matching		
		ICOs vs PD (N=993)	ICOs vs SSS (N=1,058)	ICOs vs SSS with LSI-R (N=902)
Suspended sentence	38.9	29.9	26.1	24.7
Community service order	31.9	29.1	29.7	28.9
Bond	55.9	49.7	52.2	52.6
Fine	76.3	71.1	73.4	73.5
Bond without conviction	12.3	12.5	11.7	12.1
No conviction	11.2	10.2	10.7	10.6
Licence disqualification	59.7	54.9	56.5	56.0
Prior proven offences (based on court appearances in prev	rious 5			
years)				
Serious violent	23.9	20.0	21.2	22.4
Acts intended to cause injury	32.6	28.4	28.3	30.0
Sexual assault and related	0.4	0.2	0.2	0.2
Dangerous or negligent acts endangering persons	11.4	9.3	10.0	9.7
Abduction, harassment and other	3.3	2.3	2.7	2.8
Robbery, extortion and related	2.0	1.8	1.9	1.9
Break and enter	5.8	3.9	5.4	6.0
Theft and related	18.5	12.8	16.0	16.6
Fraud, deception and related	8.4	6.0	6.7	6.7
Illicit drug	15.7	11.9	14.2	15.1
Weapons	2.5	1.8	2.5	2.6
Property damage	18.3	15.4	16.1	17.0
Public order	19.1	15.2	17.6	18.9
Traffic and vehicle regulatory	52.7	49.9	49.1	48.3
Drive while licence disqualified	31.9	27.7	28.5	26.6
Exceed the prescribed content of alcohol	32.5	31.8	30.7	31.0
Offences against justice procedures	36.9	29.8	32.3	32.5
Breach of custodial order	5.2	1.7	4.5	4.4
Breach of community-based order	21.8	17.1	17.4	17.4
Breach of violence order	11.9	9.9	10.0	10.4
Strictly indictable	3.8	2.5	3.7	3.7
Indictable	52.1	44.2	46.3	48.3
LSI-R	32			
Overall score (mean)	19.1	17.1	18.3	19.0
Missing	6.6	5.9	6.4	0.0
Low	26.4	32.9	30.0	27.7
Medium-low	38.6	41.5	38.8	43.1
Medium	22.8	16.6	19.7	23.1
Medium-High	4.7	2.7	4.4	5.1
High	1.0	0.3	0.9	1.0

Note. Potentially an offender could have received an ICO as a principal penalty at more than one court appearance during the period of interest. In the above table (first column) the offender was included for each occasion an ICO was received as a principal penalty.

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