



## REDUCING INDIGENOUS CONTACT WITH THE COURT SYSTEM

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**Aim:** To examine the relationship between the number of Indigenous defendants appearing in the NSW Local Court and the rate of Indigenous recidivism.

**Method:** A simple model of the Indigenous recidivism process was developed and then used to simulate the effect of changes in the rate of Indigenous recidivism.

**Results:** Reducing the rate of Indigenous recidivism is an effective way of reducing the over-representation of Indigenous defendants in court. A 20 per cent reduction in the rate of Indigenous re-appearance in the court system, for example, would reduce the ratio of Indigenous to non-Indigenous Local Court appearances from 1 in every 9.6 cases to 1 in every 18.6 cases.

**Conclusion:** Efforts to reduce Indigenous over-representation in the criminal justice system should be focussed on offender rehabilitation and assistance in promoting compliance with court orders.

**Keywords:** Indigenous, court, rehabilitation, driving offences, simulation

### INTRODUCTION

The over-representation of Indigenous Australians in custody is a matter of long-standing and justified public concern. Latest figures indicate that the Indigenous imprisonment rate in Australia is nearly 18 times the non-Indigenous imprisonment rate (Australian Bureau of Statistics 2009). One of the reasons for the high rate of Indigenous imprisonment is the high rate at which Indigenous offenders are reconvicted and return to prison (Snowball & Weatherburn 2007). In NSW, recent estimates suggest that 74 per cent of Indigenous prisoners eventually return to prison, compared with 52 per cent of non-Indigenous prisoners (Weatherburn et al., 2009). Similar findings have been reported in other States (Broadhurst & Maller, 1990).

Given that Indigenous offenders are substantially overrepresented in prison, one would expect them to be substantially over-represented among those appearing in court on criminal charges, and they are. National data are impossible to obtain but in NSW, Indigenous defendants are over-represented in court by a factor of nearly eight. (Unpublished data, NSW Bureau of Crime Statistics and Research). A number of efforts have been made over the last few years to reduce Indigenous contact with the court system through the creation of Indigenous diversion programs, such as Circle Sentencing

(Potas 2003), Koori Courts (Harris, 2006) and Murri Courts (Parker & Pathe, 2006). While these options may eventually help strengthen informal social controls in Indigenous communities, there is not much evidence as yet that they have any impact on Indigenous re-offending (Fitzgerald, 2008) or that they produce a durable reduction in the number of Indigenous appearances in court. Not much attention seems to have been given to the scope for reducing Indigenous over-representation in court through programs that reduce the rate of Indigenous recidivism.

Earlier research by the Bureau shows that reducing the proportion of Indigenous offenders who return to custody would exert a much larger effect on Indigenous over-representation in prison than diverting Indigenous offenders from prison who had never been to prison before (Weatherburn et al., 2009). The purpose of this bulletin is to extend the Weatherburn et al. (2009) analysis to the court system and estimate the effects on Indigenous over-representation in the NSW Local Courts of a reduction in Indigenous rate of return to court. In the next section of the bulletin, we summarize the methods employed to obtain these estimates. We then present and discuss our results.

# METHOD

## The model of recidivism

The method used to estimate the effect of a reduction in Indigenous recidivism is essentially the same as that described in Weatherburn et al. (2009) and will not be repeated in detail here. In brief, we use a simple model of the recidivism process to estimate the proportion of Indigenous offenders who will eventually re-offend and return to court. We then vary this proportion and examine its effects on the total number of Indigenous court appearances.

Figure 1 provides a schematic version of the model, which is similar to that proposed by Blumstein et al., (1969) for the criminal justice system. The term (N) denotes the annual number of court appearances resulting in the conviction of an Indigenous offender. Each year a variable number (A) of defendants enter the adult court system for the first time and are convicted of an offence. An unknown proportion (P) of these offenders are at some point reconvicted of a further offence. The remainder (1-P) never return. For convenience in what follows we refer to those who return as recidivists and those who do not return as non-recidivists. Note, however, that we count a person as a recidivist if they return to court on criminal charges, regardless of whether that appearance results in a conviction. This makes our analysis relevant to policies that seek to reduce the rate of return to court without reducing re-offending (e.g. policies that seek to alter the sanctions imposed on repeat offenders).

We assume that the probability of reappearance in court for recidivists is constant and independent of the time since the last appearance (i.e. returns to court are random for those who return). We also assume that the time between one court appearance and the next is unaffected by the penalty imposed. If these assumptions are met it can be shown that, in a stable state (i.e. when N is no longer changing):

$$N = \frac{A}{(1 - P)} \tag{1}$$

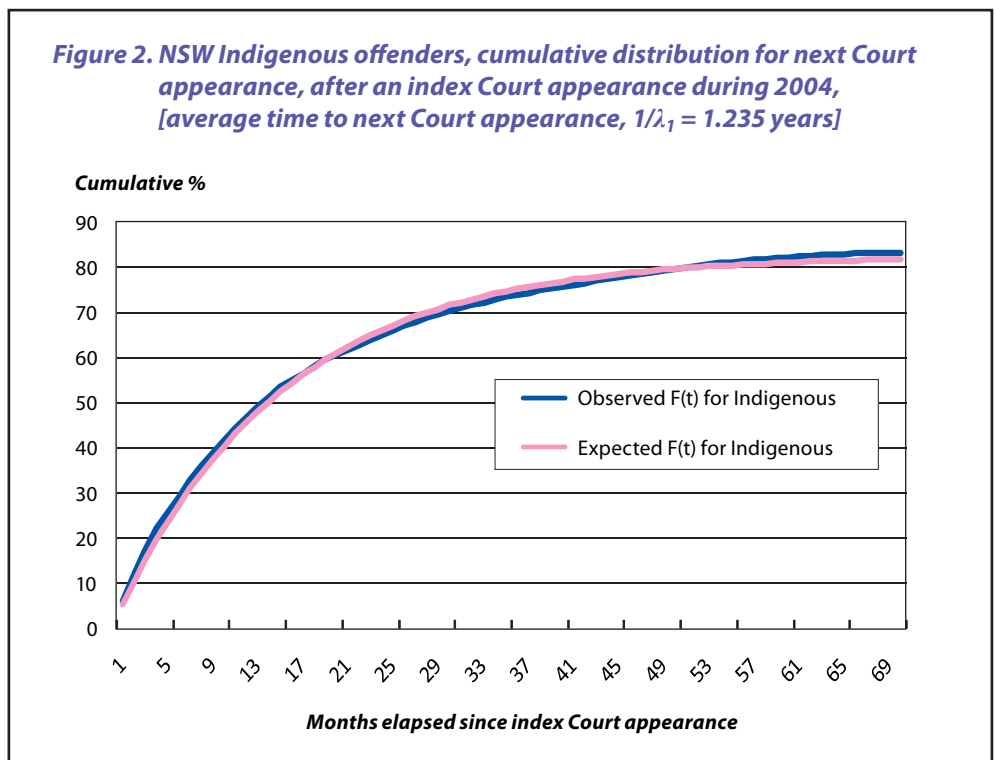
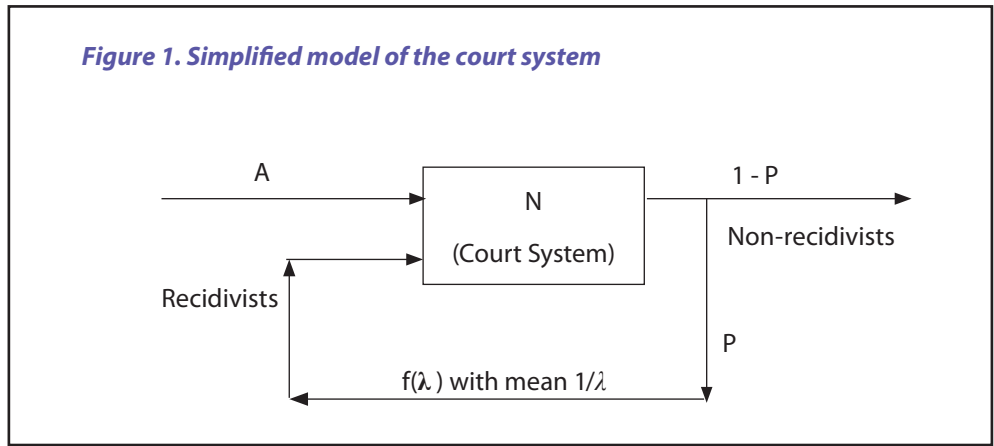
### Parameter estimation

Data on A can be obtained from the NSW Bureau of Crime Statistics Re-offending database or ROD (Hua & Fitzgerald, 2006).

In the five years from start of 2004 to end of 2008, the average value of A for Indigenous defendants was 1,419. To estimate P we note that, on our assumptions, the cumulative distribution of time to re-appear in court (F(t)) is given by:

$$F(t) = P(1 - e^{-\lambda t}) \tag{2}$$

To estimate P, we need to fit equation (2) to data on the time between successive court appearances for Indigenous defendants. The data for this purpose were drawn also from ROD (Hua & Fitzgerald 2006). Because the vast majority (93%) of the criminal workload of the courts is dealt with by the Local Courts, we focussed on Indigenous appearances in the Local Courts. To estimate P and  $\lambda$ , we first determined the cumulative distribution of return to court for a cohort of Indigenous defendants who appeared in court in 2004 and who were followed up for any subsequent appearance within the next 60 months. We then fitted equation (2) to the cumulative distribution using the maximum likelihood procedure in the statistics/data analysis package in STATA 10.0. This process yielded an estimate of P = 0.823 and  $1/\lambda_1 = 1.235$  years. In other



words, approximately 82 per cent of Indigenous defendants appearing in court will eventually re-appear in court on further criminal charges. The average time between appearances is about 1.2 years. Figure 2 shows the fit between predicted and observed proportions returning to court. The fit is very good, suggesting the model is an appropriate vehicle for examining the effect of changes in the proportion of Indigenous defendants returning to court.

## RESULTS

We now use the value of P obtained in the previous section to examine the effect on N (the number of court appearances) of changes in P. Table 1 shows the reduction in N resulting from a 1, 5, 10, 15 and 20 per cent change in P. As a point of comparison, we also show the effects of a reduction in A, which are proportional to the change in A.

**Table 1: Number of Indigenous court appearances by reduction in (A) and (P)**

Reduction in P (%)	Reduction in N	% of reduction in N	Reduction in A (%)	Reduction in N	% of reduction in N
1	358	4.46	1	80	1
5	1521	18.9	5	402	5
10	2558	31.8	10	804	10
15	3311	41.18	15	1206	15
20	3882	48.28	20	1608	20

The effects are striking. A 10 per cent reduction in the rate of Indigenous recidivism would reduce the number of Indigenous court appearances by 2,558 per annum, or more than 30 per cent. A 20 per cent reduction in P would reduce the annual number of Indigenous court appearances by 3,882, or 48 per cent. By way of comparison, a 20 per cent reduction in A (the number of Indigenous defendants appearing in court for the first time) would only reduce the overall number of Indigenous court appearances by 1,608; less than half that obtained by the same sized reduction in P. Looked at another way, a 20 per cent reduction in the rate of Indigenous re-appearance in the court system would reduce the ratio of Indigenous to non-Indigenous Local Court appearances from 1 in every 9.6 cases to 1 in every 18.6 cases.

## DISCUSSION

The estimates just presented depend upon the assumptions underpinning our model of the recidivism process. The model contains two key assumptions. The first is that returns to court are random for those who do return. This assumption is supported by the close fit between predicted and observed cumulative distributions of court appearance (see Figure 2). The second key assumption is that the sanctions imposed by courts exert no effect on the risk of re-offending. This is a difficult assumption to assess because research on the specific deterrent effect of sanctions is both limited and variable in quality.

The most common sanctions imposed on Indigenous offenders in the NSW Local Court are fines (35%), community

based orders (both supervised and unsupervised) (36%) and prison (20%) (NSW Bureau of Crime Statistics and Research, 2009). There are no studies of the effect of these sanctions on Indigenous offenders. Only two studies appear to have examined the effect of fines on recidivism generally. One, an American study (Gordon & Glaser, 1991), found that fines coupled with probation exerted more of a deterrent effect than probation on its own. The other, an Australian study (Moffatt & Poynton, 2007) found no deterrent effect of higher fines on driving offences. The effect of higher fines on non-driving offences does not appear to have been examined. The balance of evidence in relation to community supervision suggests that it has little or no effect (Weatherburn & Trimboli; 2008; MacKenzie 2002; Weatherburn & Bartels 2008). The balance of evidence in relation to prison suggests a small criminogenic effect or no effect at all (Nagin, 1998; Gendreau, Goggin, & Cullen, 1999; Doob & Webster, 2003; Villettaz, Killias & Zoder, 2006; Pratt, Cullen, Blevins, Daigle, & Madensen, 2006; Nagin, Cullen & Jonson, 2009; Green & Winik 2010). Taken as a whole, these findings suggest that if the penalties imposed by courts exert any deterrent effect, that effect is comparatively small.

We turn, then, to the question of whether and to what extent it is possible to reduce the rate of Indigenous recidivism. There are, unfortunately, few rigorous studies of the effect of correctional programs on Indigenous recidivism. Those that have been conducted are either methodologically weak or find no effect (Fitzgerald 2008). The general evidence on rehabilitation presents a different picture. In her review of the available evidence on recidivism generally, MacKenzie (2002) concluded that the best rehabilitation programs reduce recidivism by 10-20 per cent. More recent reviews suggest that a reduction of 10 per cent is entirely feasible. Aos et al. (2006) compared average effect sizes for a wide variety of programs designed to reduce recidivism. The largest average reductions in re-offending were those associated with intensive supervision coupled with treatment (11 studies with an average 16.% reduction), vocational education in prison (4 studies with an average 9% reduction) and adult drug courts (57 studies with an average 8% reduction). Investment in drug and alcohol treatment and vocational training would seem particularly worthwhile for Indigenous defendants because drug and alcohol abuse, early school leaving and unemployment have all been shown to be strongly related to the risk of Indigenous arrest (Weatherburn, Snowball & Hunter 2008).

There are two other areas where there may be significant scope to reduce Indigenous recidivism. Nearly a quarter of all Indigenous appearances in the NSW Local Court are for road traffic and motor vehicle regulatory offences (NSW Bureau of Crime Statistics and Research 2009). Many of these offences are committed by people who have been caught driving a motor vehicle after having had their driving license suspended for non-payment of a fine (NSW Sentencing Council, (2007). Any initiative that reduces the number of Indigenous offenders who lose their license for non-payment of fines would reduce the rate at which Indigenous offenders re-appear in court. The new Work and Development Order scheme recently introduced

by the NSW State Government has the potential to achieve this goal. The second area where rates of Indigenous re-appearance in court might be reduced, concerns compliance with orders issued by courts. Eleven per cent of Indigenous appearances in the NSW Local Court are due to breaches of justice orders (e.g. breach of bail, breach apprehended violence order, breach of parole) (NSW Bureau of Crime Statistics and Research 2009). It may be worth investigating the reasons behind this high rate of non-compliance with community based orders to see whether there is some way in which it can be reduced.

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