Effect of income management on electronic gaming machine expenditure

On 17 August 2007 the federal parliament passed the Social Security and Other Legislation Amendment (Welfare Payment Reform) Act 2007 as part of a response to allegations of child abuse and neglect in the Northern Territory (NT). Under this legislation, fifty per cent of the welfare payments received by Aboriginal residents living in prescribed areas of the Northern Territory were to be solely used for what the Commonwealth designated as ‘priority needs’ (food and clothing for example). Income management was designed to reduce expenditure on more risky or socially damaging forms of consumption (i.e. alcohol, tobacco, pornography and gambling). Various methods were introduced between September 2007 and October 2008 to manage quarantined funds, including the allocation of funds to retailers, store gift cards, and, most recently, the ‘BasicsCard’ (where Electronic Funds Transfer Point of Sale (EFTPOS) cards are restricted to purchases of priority needs).

Aim
To determine the effect of income management on electronic gaming machine (EGM) gambling expenditure in Alice Springs and Katherine, NT.

Data
EGM expenditure data from July 2002 to December 2009, disaggregated by EGM venue and month, was obtained from the NT Department of Justice. While expenditure data for the Alice Springs casino was not available, expenditure data for all eight clubs and five hotels in Alice Springs and Katherine were analysed. To enable direct comparison between venues, expenditure per machine (EPM) was used as the outcome variable. Expenditure values were adjusted for inflation using the Consumer Price Index for Capital Cities to 1996 AUD.

Methods
Interrupted time series analysis with seasonal autoregressive moving average techniques was used to quantify the impact of income management on EPM for each EGM venue. Two possible patterns of effect were tested for, an abrupt permanent effect that lasted until December 2009 and an abrupt temporary effect in which an immediate change in EGM expenditure slowly receded over time.

Results
Only the Todd Tavern (Alice Springs) and Crossways Hotel (Katherine) showed significant and permanent reduction in EPM post intervention (see Figure 1). According to this estimate, monthly EPM after December 2007 fell by approximately 800AUD for the Crossways Hotel and 450AUD for the Todd Tavern (adjusted to 1996 AUD values).

The Katherine Hotel showed a temporary spike in EGM expenditure (see Figure 1). It is estimated that expenditure increased by approximately 1200AUD per machine in the Katherine Hotel immediately after August 2007 and gradually returned to pre-intervention levels. No statistically significant change in EPM was detected in other venues.

Discussion
For the Todd Tavern and Crossways, the analysis suggests that income management may have been responsible for the reduction in EGM expenditure. It is difficult to reconcile income management, a policy that is designed to reduce disposable income, with the temporary increase in EGM revenues for the Katherine Hotel. The high level of mobility among the Aboriginal population of the Katherine region may be a contributing factor. It is possible that the introduction of alcohol bans in remote communities stimulated temporary migration to Katherine, thereby swelling the number of EGM gamblers at the Katherine Hotel. What is clear is that the effects of income management varied between hotels depending on local factors.

The lack of a significant change in EPM in other hotels in Alice Springs with a high proportion of Aboriginal patrons is further evidence of uneven effects of income management.
None of the clubs displayed any change in EPM attributable to income management. We suggest this is because Aboriginal patrons in the NT are more highly represented in the public hotels rather than the membership-based clubs. That is not to say that EGM expenditure in the clubs was not affected to some degree by income management. Rather, Aboriginal patrons are unlikely to be gambling proportionately enough in the clubs for this amount to be reflected in aggregate monthly figures at statistically significant levels.

Figure 1: EPM for three venues, pre- and post-intervention

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