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# Pre-commitment systems for electronic gambling machines

Preventing harm and improving consumer protection

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Electronic gambling machines (EGMs), or poker machines, are a high-intensity form of gambling and the most harmful form of gambling available in Australia. While less than a third of the Australian adult population (30%) use EGMs annually, and 5% use them weekly, around 30% of weekly users experience significant gambling harm.

Well-designed electronic pre-commitment systems can prevent and reduce harm from EGM use. Forms of pre-commitment have been introduced in jurisdictions around Australia and internationally. The most effective systems require all gamblers to set a binding limit on the amount of money they are prepared to lose. To be most effective, the system needs to be universal and available across jurisdictions, and with limits that are binding.

## KEY MESSAGES

- EGM users often underestimate their gambling expenditure by substantial amounts. Pre-commitment can provide a way for gamblers to set and track monetary and time limits to prevent unintended, excessive use. Pre-commitment systems can also facilitate the provision of an account summary for EGM users.
- The extent to which registered EGM use is required across a large area (e.g., an entire jurisdiction) and whether maximum loss limits and time limits are binding and irrevocable are critical aspects of the success of a pre-commitment system capable of preventing and reducing harm.
- A partial or incomplete system that does not require all gamblers to use the system may be ineffective in supporting gamblers to stick to pre-determined limits.
- Experiences internationally and in Australia have demonstrated that the uptake of limit setting in partial pre-commitment systems is low.
- Incorporating pre-commitment into an electronic loyalty program may provide users with conflicting messages about spending.
- Pre-commitment consumer interfaces should be intuitive and simple to navigate to encourage engagement with all the features of the system, and privacy and confidentiality of user data is paramount.
- Binding, universal systems will provide the best protection from harm; however, this design is not yet available in Australia.

## What is an EGM?

Current Australian EGMs, also known as “pokies”, are a high-intensity, continuous form of gambling that allow bets to be wagered every few seconds. National minimum technical standards for EGMs are developed and agreed by Australian state and territory regulators and the New Zealand Department of Internal Affairs (Australian and New Zealand National Standard Working Party, 2015). There is no skill involved in this form of gambling. While the outcome of a wager is determined by a random number generator, EGMs are designed using increasingly sophisticated structural characteristics such as “losses disguised as wins” or “near misses<sup>1</sup>” (see Livingstone, 2017 for information about the

<sup>1</sup> While “near miss designs” are prohibited on Australian machines, the repetition of symbols on reel strips may increase the likelihood of a near miss occurring (other than by chance). EGM users have no way of knowing if this is occurring.

range of features and characteristics). These characteristics encourage users to spend more money and time on the device (Barton et al., 2017; Dixon, Harrigan, Sandhu, Collins, & Fugelsang, 2010; Harrigan, 2008; Problem Gambling Institute of Ontario, 2013; Schüll, 2012). In Australia—unlike most other countries—EGMs are highly accessible as they are available for use in hotels and clubs in local communities<sup>2</sup> (i.e., outside casinos) for up to 20 hours a day.<sup>3</sup>

## Why improve EGM safety?

Community-based EGMs are the largest source of gambling expenditure—and harm—accounting for around \$14 billion (62%) of the \$22.7 billion lost by Australians to gambling in 2015 (QGSO, 2016). A Roy Morgan survey found that 2.9 million adult Australians (16%) used EGMs in the past three months and, of these, 1.2 million (42%) used a machine at least once a week (Roy Morgan Research, 2015). Among those who experience gambling-related problems, around 75% reported EGMs as their greatest source of harm (Delfabbro & King, 2012; Productivity Commission, 2010). Of those who use EGMs weekly, it is estimated that 30% experience significant harm (Productivity Commission, 2010). There is also evidence that communities least able to afford gambling are losing the most money, putting additional strain on already disadvantaged households, and transmitting and entrenching poverty (Rintoul, Livingstone, Mellor, & Jolley, 2013).

## The burden of harm

In 2015, an estimated 8% of the Australian adult population—1.4 million people—experienced gambling problems (Wilkins, 2017). Of these, almost half were moderate and high risk gamblers. The harm this group experiences can be severe. It may include financial problems leading to bankruptcy, housing stress and homelessness, family violence and relationship breakdown, neglect and maltreatment of children (Black, Shaw, McCormick, & Allen, 2012; Dowling et al., 2014; Markham, Doran, & Young, 2016; Shaw, Forbush, Schlinder, Rosenman, & Black, 2007), and mental and physical health problems including depression, anxiety, suicide and suicidal ideation (Hodgins, Mansley, & Thygesen, 2006). Given this, it is unsurprising that people experiencing gambling problems use health services at a higher rate than non-problem gamblers (Morasco et al., 2006).

In 2010, the social costs attributable to those with severe gambling problems in Australia were estimated to be between \$4.7 and \$8.4 billion a year (Productivity Commission, 2010). This estimate includes personal and family breakdown, crime and legal costs, productivity and employment, bankruptcy and counselling (Productivity Commission, 1999, 2010). Importantly, this estimate does not include completed suicides, and does not attempt to attribute costs to low (or even moderate) risk gamblers.

There are substantial benefits to be gained from preventing and minimising harm for all gamblers. In aggregate, “low risk” gamblers make up the largest number of those experiencing harm. A recent estimate demonstrated that low and moderate risk gamblers in aggregate comprise 85% of the total burden of harm, with a burden similar in magnitude to alcohol use and dependence and major depression (Browne et al., 2016). For every problem gambler, six others—children, partners, friends and colleagues—are directly affected by financial distress and/or poor mental and physical health (Goodwin, Browne, Rockloff, & Rose, 2017).

## Minimising the harm

EGM users frequently and substantially underestimate how much they spend gambling (Nower & Blaszczynski, 2010) and commonly report spending more than they had intended (Thomas et al.,

<sup>2</sup> Western Australia is the only Australian state where EGMs are not legally available outside the casino. In all other states and territories EGM are also available in community hotel and club venues.

<sup>3</sup> In some Australian casinos EGMs are available 24 hours a day.

2013). The financial burden of these losses is spread across the household through the diversion of essential expenditure, as well as in the community through the concentration of spending in gambling premises. Difficulty in controlling an urge to gamble, spending more than intended, and going back another day to try to win back lost money are some key characteristics of problematic gambling (Ferris & Wynne, 2001). Technology-based systems that can support gamblers to limit their spending are therefore likely to be effective not only in preventing the escalation of gambling problems but also, over time, in reducing the harm for gamblers who are already chronically overspending.

There  range of opportunities to modernise harm minimisation for EGM gambling. International evidence has demonstrated that modifications to EGMs can contribute to a reduction in gambling-related harm (Rossow & Hansen, 2015). To date, efforts to prevent and reduce gambling harm in venues have emphasised measures that either currently lack evidence of effectiveness or have been shown to be largely ineffective (Livingstone, Rintoul, & Francis, 2014; Productivity Commission, 2010). These include paper-based, self-exclusion programs, training venue staff to interrupt observable problematic gambling and refer gamblers to help services, and the provision of passive social marketing messages such as posters next to machines advising gamblers to set a limit and stick to it.

Recent initiatives in Victoria included the removal of automatic teller machines (ATMs) to reduce gamblers' access to cash. However, the widespread replacement of ATMs with EFTPOS<sup>4</sup> machines may be undermining the early evidence of the effectiveness of this initiative (Rintoul, Deblaquiere, & Thomas, 2017; Thomas et al., 2013; Victorian Responsible Gambling Foundation, 2015).

Modifications in the form of an electronic pre-commitment system could provide valuable support to gamblers by reinforcing their intentions to adhere to predetermined limits.

## Pre-commitment as a harm-reduction measure

### What is pre-commitment?

Pre-commitment in an EGM context refers to decisions made by a gambler about the amount of money (and, less commonly, time) they intend to spend gambling prior to gambling. A variety of non-electronic strategies can be used by gamblers to “pre-commit” to a specific loss limit—for instance, taking a limited amount of money to a gambling venue or leaving ATM cards at home to avoid the temptation to spend more money than intended gambling. However, these strategies are fallible. Using the previous example, gamblers have been known to return home repeatedly to access additional money for gambling (Moore, Thomas, Kyrios, & Bates, 2012). Electronic pre-commitment systems essentially allow gamblers to set a limit on the amount of money and/or time they wish to spend gambling before a session commences.

### Full vs partial pre-commitment systems

Pre-commitment systems can be designed in a variety of ways; however, there are fundamental issues that set the systems apart. These are whether the system is:

- full (also referred to as “mandatory”,<sup>5</sup> complete or universal), meaning all EGM users are required to use a pre-commitment system and set limits; or
- partial (also referred to as “voluntary” or incomplete), meaning it is optional for gamblers to use the pre-commitment system; or

<sup>4</sup> EFTPOS “electronic funds transfer at point of sale” was designed as a payment system for electronic funds transfer but can be used in EGM venues as a substitute for ATMs.

<sup>5</sup> As highlighted by the Productivity Commission (2010, p. 10.20), “mandatory” and “voluntary” are confusing terms and should be avoided. Essentially all systems are voluntary as they all allow users to select a loss limit.

- binding limits, meaning that use is suspended when a limit is reached for the remainder of the duration of time that the limit applies (e.g., a day or month).

There have been numerous trials and several implementations of different pre-commitment systems internationally. Evidence demonstrates that the use of pre-commitment features assists gamblers to reduce expenditure, and it is thought that over time these systems may also prevent the escalation of problematic gambling. Additional aspects that support the functionality of these systems are those that supply meaningful account summary information, are clear, simple to use and minimise inconvenience for gamblers.

See the section “Recent experiences with pre-commitment” below for more detail, examples of recent systems around Australia and internationally and the lessons learned from their successes or failures.

## Best options for pre-commitment

Pre-commitment systems have been designed and implemented in a variety of different models. Systems have been venue-based, linked across corporations or across an entire geographic area, such as an entire province or country. Partial systems have been compromised in their capacity to achieve harm reduction and consumer protection goals because they are perceived as being only for gamblers with problems, creating a barrier to wider adoption. Furthermore, gamblers can override set limits by gambling without a card or continuing beyond a pre-determined limit in partial systems. Given that one aspect of gambling problems is a loss of control in spending, the design of these systems will not provide adequate support for at-risk or problem gamblers.

A full system with binding limits is therefore likely to be most effective in preventing and reducing harm. Evidence also shows that success in reducing and preventing harm will depend upon the extensiveness of the system (i.e., jurisdiction-wide, not just venue-based) (Williams et al., 2012). Furthermore, it is recommended that the delivery of a pre-commitment system is not combined with a loyalty card as this sends conflicting messages about spending to consumers.

All features in a pre-commitment system rely upon the registration of a single user to a single account to ensure the integrity of account summary data. If all gambling is not recorded, the features will not be capable of displaying accurate information. A full, universal system— where all EGM use by an individual is captured through gambling registered to the individual— is likely to be the most useful in ensuring:

- gamblers are prevented from exceeding their limits;
- gamblers are provided with information about their EGM use; and
- EGM use does not occur outside the network, that is, the system should operate over a wide area such as an entire nation or state.

The best available evidence demonstrates that well-designed, binding, full systems are likely to be the most effective in supporting gamblers to adhere to limits. It is not possible to predict who in a population will develop a gambling problem, and therefore providing a universal support system is likely to be the most effective (Rose, Khaw, & Marmot, 2008). A full pre-commitment design aligns with a public health approach that recognises universal, population-wide strategies are the most effective in reducing harm from gambling.

## Recent experiences with pre-commitment

### Australian experiences

In Australia, responsibility for the regulation of EGMs primarily rests with state and territory governments, resulting in considerable variability in EGM operation across Australia. Since around 2003 a limited number

of venues have introduced pre-commitment. In 2010, the Productivity Commission recommended the staged adoption of full pre-commitment systems across Australian EGMs. Specifically, this included a trial of the technical capacity of the system to facilitate an optimum design, followed by a national implementation of a partial system, and the introduction of a full system by 2016.

While plans for the trial of pre-commitment were developed in 2013, these were discontinued following the amendment to the Commonwealth *Gambling Reform Act 2012* and the enactment of the *Gambling Measures Act 2012*<sup>6</sup> in March 2014. Consequently, no full system of pre-commitment is yet available in Australia. Partial systems have been trialled at venues in New South Wales, South Australia and Queensland, often as a component of loyalty or cashless gambling programs. In December 2015, Victoria became the first Australian state to adopt a jurisdiction-wide partial pre-commitment system.

## Victoria

The **Victorian** “YourPlay” system provides the option for EGM users to register for pre-commitment and then decide each time they gamble whether to use their card. Limits set under this system apply to all EGMs in Victoria and are recognised through the insertion of the card. However, card use is not required to use an EGM. When monetary limits are reached the machine is momentarily disabled and a message is provided to the user indicating they have reached their pre-determined limit. The user can then elect to continue gambling by clicking through the screen or exit the system by removing the card. As such, the system acts as an information cue, reminding the user that they have reached their pre-determined limit rather than as a protective measure to prevent unintended overspending. People can choose to sign up using a dedicated pre-commitment card or use a card that is linked to an existing gambling operator’s loyalty program. If they use a loyalty program card, loyalty rewards will not accrue to the user after the limit has been reached. The system is capable of being converted to a full system in the future. An evaluation of this system is underway. Crown Casino in Melbourne was an early adopter of partial pre-commitment as a component of their loyalty program.

## South Australia

From 2018, EGM operators in **South Australia** will be required to provide automated risk monitoring, a system that would use machine data to track problematic gambling. The regulator in this state has reported that from October 2016 operators using loyalty programs were required to implement predictive monitoring but that compliance was not achieved (Independent Gambling Authority, 2016, p.4). The intention is for this program to analyse user data to identify problematic gambling patterns to assist in identifying gamblers who may need support. While not a pre-commitment system, it demonstrates the potential for such a system to support users to limit problematic gambling and potentially enforce codes of conduct by venues.

Pre-commitment has been available in over 70 venues in South Australia since 2008. Various systems have been trialled and evaluated. The evaluation of a Worldsmart trial found a 32% reduction in user turnover<sup>7</sup> for those who elected to use the card, with high-risk gamblers reducing their spending the most (56%) (Responsible Gambling Working Party, 2010). An evaluation of the loyalty card Maxetag, containing partial pre-commitment features, took place in 2011. A pilot of Maxetag at two South Australian venues allowed users to set a budget limit but showed limited efficacy from a harm minimisation perspective. Of the small number of users who set a monetary limit (1.8% at venue 1 and 0.8% at venue 2), more than half exceeded this limit and, of those who exceeded their limit ( $n = 9$ ), most did not use the feature again ( $n = 6$ ) (Delfabbro, 2012). Furthermore, the limit-setting features were described as potentially confusing for users. Overall, this system was not found to prevent gambling-related harm.

<sup>6</sup> This Act replaced the *Gambling Reform Act 2012*

<sup>7</sup> Turnover is the amount wagered, as distinct from net losses or expenditure.

## New South Wales and Queensland

A small number of venues in **New South Wales** have provided cashless, card-based gambling (Nisbet, 2005). A component of these cards are “responsible gambling” features that include the option to set a limit on spending. Those who used these cards found that they provided some support in managing their spending.

Trials of cashless gambling cards that also offer pre-commitment limits were conducted across several venues in **Queensland** between 2005 and 2008 (Office of Regulatory Policy, 2009). An evaluation of the Sandgate RSL Trial, focusing on user attitudes towards the eBet partial pre-commitment system, found that 58% of those who used the card thought that it supported them to consider how much they were spending, and 45% reported that it assisted in considering if EGM use was affordable (Schottler Consulting, 2008). However, in this trial only 18 of the 64 gamblers using the card elected to set a limit. Of those who did set a limit, expenditure on the EGMs decreased more (\$64 to \$39) than for those who did not set a limit (\$53 to \$52). The Redcliffe RSL Trial in Queensland found that despite active venue marketing of a SIMPLAY™ cashless gambling and pre-commitment card, few gamblers adopted the technology. Of those who did begin using the card ( $n = 341$ ) only 13% used the partial pre-commitment options, with the remainder using the card for cashless gambling. Of 45 participants in this trial that set a daily limit, 30 of them exceeded it during the trial (Schottler Consulting, 2009). Interestingly, those using the card system at this venue increased their spending more (4.4%) than those who were not using the system (1.35%).

## International experiences

### Norway

Internationally, full pre-commitment systems are now available in Norway and Sweden. In **Norway**, in 2009, the government-owned gambling operation introduced a full, nationwide system for EGMs—known as video lottery terminals (VLTs). This followed the re-introduction of a limited number of modified EGMs in 2010, following a complete ban in July 2007 (Lund, 2009). This system is unique in the world, as it prescribes a universal maximum loss limit per day and month. An assessment of the impact of these changes demonstrated that losses fell following the introduction of new machines in 2009, while calls to gambling helplines reduced substantially, providing indirect evidence that the changes were successful (Lund, 2009).

### Sweden

The government-owned gambling provider in **Sweden**, Svenska Spel, introduced pre-commitment for online gambling in 2008, and then established a full pre-commitment system for EGMs in 2013. This system requires all EGM gamblers in Sweden to register and set a limit on their daily and monthly spending, as well as a time limit per day. This system was extended to all legal gambling platforms in Sweden from mid 2014.

### Nova Scotia (Canada)

In **Nova Scotia** a partial pre-commitment system, “MyPlay”, was introduced in 2010 following several years of pilot research relating to the use of responsible gambling devices (Omnifacts Bristol Research, 2007; Schellinck & Schrans, 2007). By 2012, the partial system was converted to a full pre-commitment system, with optional limit setting. A key change was also the shift to a system of “light enrolment” that did not require users to provide identification to obtain a card to use this system. This resulted in the use of multiple cards or re-enrolment, weakening the account and limit tracking functions (Polatschek, Wadden, & Gwynn, 2013; Schellinck & Schrans, 2010). An evaluation of the original system found that those gamblers who used the responsible gambling features found them to be beneficial overall (Schellinck & Schrans, 2010). However, the system was disabled in 2014 following pressure from gambling operators. Reasons cited included declining

revenue from falling gambling participation and concerns that the system was not reducing harm due to problems with the design (CBC News, 2014; Nova Scotia Provincial Lotteries and Casino Corporation, 2014).

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For summaries of the different trials and implementations and a more detailed description of the evidence see the AGRC reports on pre-commitment listed in the key reading section.

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## Lessons learned

Experiences from several jurisdictions now provide some evidence about the best way to design an effective pre-commitment system. A partial or incomplete system that does not require all gamblers to use the system may be ineffective in supporting gamblers to stick to pre-determined limits. While in a venue, and surrounded by visual and auditory cues to spend, earlier intentions to limit spending may be overridden, for example by an urge to chase losses, and use may continue to escalate. Non-binding systems may simply serve as reminders rather than actively support gamblers at such critical junctures.

A centralised system provided across an entire jurisdiction (not only at the venue or operator level) can provide meaningful account summary information to gamblers. If gamblers consistently use their card, this is likely to be valuable for those who are easily able to stop gambling once they have reached self-determined limits. However, experiences internationally and in Australia have demonstrated that the uptake of limit setting in partial pre-commitment systems is low—usually less than 1% of gamblers (Delfabbro, 2012; Salis, Wardle, Morris, & Excell, 2015)—and that people perceive partial systems to be useful only for people with existing gambling problems (Delfabbro, 2012; Responsible Gambling Working Party, 2010; Schellinck & Schrans, 2010). The partial pre-commitment system in Nova Scotia demonstrated that cards became a stigmatising marker of perceived problem gambling (Schellinck & Schrans, 2010). A universal system, requiring all gamblers to use a device/card, would normalise use of the system. It would also ensure complete data capture, meaning users would have accurate account summaries.

Social and political factors may undermine the effectiveness of pre-commitment systems (Panichi, 2013); public confidence in the privacy and confidentiality of user data is paramount. Careful communication about the benefits of a system in preventing and reducing harm can serve to allay concerns consumers may have about a system that is capable of tracking their gambling spending. In an attempt to overcome community concern about privacy, Nova Scotia introduced “light enrolment” that did not require users to register their card. This led to a proliferation in the use of multiple cards, which ultimately contributed to the failure of the system in this province, with the decommissioning of the pre-commitment system in 2014 (Staff writer, August 20, 2014).

A review of pre-commitment concluded that a potential unintended consequence is that “a proportion of problem gamblers unmotivated to seek treatment may set higher limits ... to compensate for, and/or avoid, potential barriers restricting options to chase losses” (Ladouceur, Blaszczynski, & Lalande, 2012, p. 220). The pre-commitment studies reviewed by AIFS found no evidence for this statement in the context of a full, universal pre-commitment system. The premise of a full, universal scheme is that, over time, users who recognise that their gambling is causing problems will reduce their spending because they are bound by limits that are set outside venues where they are removed from cues to spend.

In addition to ensuring the technical feasibility of the system, consumer interfaces should be intuitive and simple to navigate to encourage engagement with all the features of the system. Where functionality and usability are poor, resistance to the system can undermine consumer confidence or may result in the low uptake of limit setting and other features.

Incorporating pre-commitment into an electronic loyalty program has been strongly criticised (Williams, West, & Simpson, 2012). These systems provide users with conflicting messages about their spending. On the one hand, they reward the gambler for increasing their spending, while on

the other hand, they offer a tool intended to assist them to constrain spending. Despite this obvious conflict, a number of systems have adopted this model, including the YourPlay system in Victoria.

The strengths and weaknesses of these systems provide valuable information that regulators and policy-makers can learn from and use when considering interventions to prevent and reduce harm from EGMs.

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