



**NEW HORIZONS  
CONFERENCE**

# **Future-Proofing the Industry: Player Safeguards and Prevention**

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## EXECUTIVE SUMMARY

This paper is prepared for British Columbia Lottery Corporation's New Horizons in Responsible Gambling Conference 2020, to provide a foundation for collective discussions on what we know, don't know, and need to find out more about as we move forward to future proof the industry.

The paper begins with a review of evidence on the evolving context for player safeguards and prevention. It then examines selected academic and practical evidence for several core player safeguards and prevention measures to establish: proven impacts and effectiveness; gaps in evidence; and evidence-based potential for enhanced effectiveness. The paper concludes with a set of questions to frame discussions at the New Horizons Conference on the roles, responsibilities, and future directions for safer gambling.

**The Evolving Context for Initiatives** – The overarching goals of responsible gambling provide the context in which safeguards and prevention initiatives are implemented and assessed. The latest evidence suggests:

- A shift to harm reduction, and to supporting safer gambling for *all*
- The need to prioritize harms to affected others
- The value of prioritizing financial harms
- The need to reinforce ideal consumer behaviours

**Education & Awareness** – Encouraging “informed play” through education and awareness resources is increasingly seen as a vital objective for making gambling safer for all players. Operator efforts have matured in this area, with branded programs that encompass resources to ensure players understand games, odds, myths, risks and strategies. Behaviour change, however, remains elusive (this applies across most player safeguards and prevention efforts). Highly accessible resource centres with personalized approaches show promise.

**Responsible Gambling (RG) Tools** – RG tools offer all players the opportunity to self-monitor and control their gambling activity. Two of the most common tools show great potential for harm reduction, with a clear focus on financial harm, while more work is needed to effect behaviour change.

- Limit-setting tools (time and money) – While they show promise, limit-setting tools may be more effective if more widely used.
- Self-assessment tools – Although there is virtually no research on their use in gambling settings, they offer a window for communication with a player who is reflecting on their gambling attitudes and behaviour.

**Cash & Credit Policies** – Policies regarding on-site access to funds for gambling are beginning to be considered as part of safeguard and prevention efforts. Two aspects of these policies are reviewed:

- Access to personal credit – Gambling on credit is clearly associated with risk; however, many forms of cash/credit access are far beyond the purview of operators. Evidence and real-world examples suggest regulators and RG specialists may wish to review policies with a view to injecting social responsibility into interactions around the use of personal credit for gambling.
- Provision of house credit – While operational risk is an important consideration, house credit programs offer significant operator control for designing responsible policies. It may be time to reconsider this as a more controlled method of offering credit in the most responsible ways possible.

**Identifying Risk Behaviour** – Measures for identifying risk are used to mitigate negative impacts for the subset of players who exhibit risk behaviours. Two sources of behaviours are reviewed:

- Player analytics – They have the potential to be used much more widely to identify and respond to risk behaviours, but also to deepen understanding of player segments and trajectories, so that operators can customize responsiveness to player needs.
- Alternative sources – Operators should be paying attention to non-play behaviours that offer clear signs of risk, such as communication and payment practices.

**Responding to Risk Behaviour** – Measures for responding to players who exhibit risk can potentially mitigate potential harm. Two forms of risk response are reviewed:

- Automated methods – Evidence suggests that well-designed messages, including self-appraisal and personally relevant content, can be highly effective. Further evidence on effectiveness of messages to change behaviours is needed.
- Personal interventions – Old fashioned human interaction is on the rise, with several jurisdictions incorporating innovative personalized monitoring strategies and case management for players who exhibit repeated or escalating risk.

**Future-Proofing the Industry** – In the concluding section, evidence is summarized to clearly establish what we know, don't know, and need to find out more about as we move forward to future-proof the industry.

Evidence suggests that future-proofing the industry requires converging efforts from operators, regulators, and gambling consumers to reduce harm from the provision of gambling, with practical strategies that target all gamblers, gamblers who exhibit risk, and affected others. Further, the most efficient and effective method of accomplishing this evolved goal is to focus on financial harm. This will require regulatory leadership and operator innovation beyond the traditional boundaries of responsible gambling initiatives. It is hoped this paper stimulates discussion and, more importantly, bold action to make gambling safer for all.

TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>2</b>
<b>SECTION 1: THE EVOLVING CONTEXT FOR INITIATIVES .....</b>	<b>5</b>
SHIFT TO HARM REDUCTION & SAFER GAMBLING FOR ALL.....	5
REDUCE HARM TO OTHERS .....	5
FOCUS ON FINANCIAL HARM .....	6
REINFORCE IDEAL CONSUMER BEHAVIOURS .....	6
<b>SECTION 2: EDUCATION &amp; AWARENESS .....</b>	<b>8</b>
PROVEN IMPACTS & EFFECTIVENESS .....	8
EVIDENCE GAPS .....	9
EVIDENCE-BASED POTENTIAL .....	9
<b>SECTION 3: RESPONSIBLE GAMBLING TOOLS .....</b>	<b>10</b>
LIMIT-SETTING TOOLS (TIME & MONEY) .....	10
SELF-ASSESSMENT TOOLS .....	11
<b>SECTION 4: CASH &amp; CREDIT POLICIES .....</b>	<b>13</b>
PROVEN IMPACTS & EFFECTIVENESS .....	13
EVIDENCE GAPS .....	13
EVIDENCE-BASED POTENTIAL .....	14
<b>SECTION 5: IDENTIFYING RISK BEHAVIOUR .....</b>	<b>15</b>
PLAYER ANALYTICS .....	15
ALTERNATIVE SOURCES .....	17
<b>SECTION 6: RESPONDING TO IDENTIFIED RISK .....</b>	<b>19</b>
PROVEN IMPACTS & EFFECTIVENESS .....	19
EVIDENCE GAPS .....	19
EVIDENCE-BASED POTENTIAL .....	20
<b>SECTION 7: FUTURE-PROOFING THE INDUSTRY .....</b>	<b>21</b>
<b>CONCLUSION .....</b>	<b>22</b>
QUESTIONS FOR DISCUSSION .....	22
<b>REFERENCES.....</b>	<b>23</b>

## SECTION 1: THE EVOLVING CONTEXT FOR INITIATIVES

Considering the evidence, the goal of responsible gambling efforts has evolved in recent years, suggesting the need to:

- Shift to a goal of harm reduction
- Seek to reduce harm that impacts three key target groups:
  - all gamblers
  - the subset of gamblers who exhibit risk, and
  - affected others (third parties)
- Maximize efficiency by prioritizing financial harms
- Reinforce ideal consumer behaviours.

While this evolved approach calls on the gambling industry to consider and protect from harm a larger population, the evidence also points to an approach that can be focused, efficient and highly effective by targeting key harms with greater precision.

### SHIFT TO HARM REDUCTION & SAFER GAMBLING FOR ALL

For decades, research in the gambling field has almost exclusively used the number and severity of cases of problem/pathological gambling or the symptoms of these disorders as the proxy for harm. As a result, harm was almost always measured by diagnostic or population assessment tools such as the Canadian Problem Gambling Index (CPGI) (Ferris & Wynne, 2001). The implication was that gambling-related harm is only experienced by people who have a gambling disorder, or by the affected others of people who have a gambling disorder. This conceptualization left operators and regulators to try to find disordered individuals or the players most likely to become disordered gamblers and coax them back to safer play.

Fortunately, efforts to define and provide ways to assess harm from gambling have matured greatly in recent years. Examples include multi-method research by Blaszczynski and colleagues (2015) to define and provide a framework for understanding harm, as well as the development of the Population Harm Supplement to the CPGI developed by Quilty and colleagues (2015). This CPGI Harm Supplement provides ten items “to assess the impact of gambling problems at the population level (e.g. family, community, and other environmental levels such as work).”

More recently a multi-disciplinary research team developed a conceptual model and taxonomy (a way of naming, ranking and classifying a field of study), as well as instruments and methods to measure gambling-related harm (Browne et al., 2016, 2017; Langham et al., 2016). This was seminal work. As a result, there is now growing consensus in research and public policy that “[h]arm from gambling is known to impact individuals, families, and communities; and these harms are not restricted to people with a gambling disorder.” (Langham et. al, 2016, p. 1). This work has helped the following shifts:

- from targeting “disordered individuals” to the broader population of gamblers;
- from the term “responsible gambling” to “safer gambling”; and
- from the key goal of preventing or reducing the incidence and prevalence of gambling disorders, to reducing harm by making gambling safer for all gamblers and their families and communities.

### REDUCE HARM TO OTHERS

While harms are more frequently borne by the individual gambler (Blaszczynski et al., 2015), the recent work on gambling harm has emphasized the impacts on affected others such as families, friends, employers, and communities (Langham et al., 2016). This suggests that, for a truly future-proofed industry, we need to consider safeguards and prevention efforts that promote harm reduction for affected others as well.

Yet, harm to third parties has rarely been the target of gambling-related harm reduction in public policy or published research. Notable exceptions include policies to pay family support obligations from lottery winnings, and third-



party exclusion programs whereby family members can request the exclusion of a gambler on the basis of proof that the gambling is causing harm to the family, such as those programs in Singapore, Australia, and New Zealand.

It will be important to discuss which stakeholders should be responsible for efforts to protect affected others. While operators are mainly responsible for the health of their players, the State and its regulatory authority may be the more appropriate responsible bodies for reducing third party harm.

### FOCUS ON FINANCIAL HARM

The evolving conceptualization of gambling harm has been crucial in sharpening the focus for harm reduction efforts by policy makers, regulators, and operators. That is, now that the goal of reducing gambling harm has been established, how should key stakeholders prioritize their efforts? For example, researchers in the province of Ontario set out to develop priorities for harm reduction policy-setting using the new conceptual model developed by Langham and colleagues (2016) to frame the research. There are seven dimensions of harm in the conceptual model:

- financial harm;
- relationship disruption or breakdown;
- emotional or psychological harm;
- decrements to health;
- cultural harm;
- reduced performance at work or study;
- criminal activity.

Investigators worked with two informant groups: international research experts on gambling harm, and Ontario policy leaders from ministries and agencies involved in gambling operation, regulation, and harm reduction. For both groups, the number one priority for public policy efforts was to reduce financial harm, followed by the dimensions of emotional/psychological harm and relationship harm. The rationale for prioritizing financial harm that emerged from this research is summarized below:

- Financial harm is the foundation of other harms.
- Chasing money to gamble drives neglect of responsibilities and potentially, criminal activity.
- Financial harm can extend to family, employers, and communities.
- Intervention at any stage can reduce longer-term impact.
- Financial harm is actionable:
  - *Amenable to intervention* – encouraging behavioural (safe gambling practices) and cognitive (correct fallacies and magical thinking) changes; and
  - *Measurable* – expenditure, revenue distribution, and other financial indicators are continuous variables that show change or stability over time, and may offer a straightforward way to identify and measure harm.

(Hilbrecht & Glynn, 2019)

The conclusions drawn from these recent studies on the need to reduce gambling harm, and on the most effective ways to do so, suggest that a focus on reducing financial harm will be fundamental to future-proofing the gambling industry.

### REINFORCE IDEAL CONSUMER BEHAVIOURS

It is helpful to articulate the role of consumers in their own health, in part because this provides a picture of the ideal consumer knowledge and behaviours that regulators and operators can work to support. Recent research into safe gambling practices for consumers is showing promising strategies to help consumers take control of their gambling.

A survey of 1,174 regular gamblers in Alberta, Canada, measured uptake of 43 potential safe gambling practices, gambling harms, and numerous risk factors for harmful gambling. To distil the most promising practices, the research

team used statistical modelling methods to determine the strength of the relationship between the safe gambling practices and the risk of harm. The result is a set of nine safe gambling practices that form the following guidelines:

- If you're not having fun gambling, stop
- Keep a household budget
- If you gamble, have a dedicated budget for your gambling
- Engage in other leisure activities, hobbies, social activities or sports
- Do not gamble if you're feeling depressed or upset
- When you gamble, always set aside a fixed amount you can spend
- Do not use credit, or cash advances on your credit card, to gamble
- Do not use gambling to make money or supplement your income
- Do not think that systems or strategies will ensure your success at gambling

(Hing et al., 2019)

It is notable that five of the nine strategies speak directly to financial harm.

While they may appear to be simple, perhaps even obvious, the safe gambling practices require gamblers “to enact several broader cognitive-behavioural change strategies that can be used to self regulate gambling” (Hing, et al., 2019, p. 20). These change strategies are paraphrased below:

- Limit finances (keep a household budget, have a dedicated gambling budget)
- Control consumption (set aside a fixed amount to spend, do not gamble on credit)
- Avoid certain behaviours (do not gamble if depressed or upset, stop if not having fun)
- Substitute other behaviours (engage in other leisure activities)
- Change cognitive strategies (do not believe systems or strategies will help you win, do not using gambling to make money)

This is promising work on practical strategies for consumers to gamble more safely. While responsibility for more broadly educating consumers on these practices may rest with prevention and health promotion agents, the gambling industry can support these practices by having them inform safeguards and prevention initiatives.

## SECTION 2: EDUCATION & AWARENESS

Encouraging informed play through evidence-based initiatives has increasingly shown to be a vital element of responsible gambling and social responsibility efforts (Benhsain, Taillefer, & Ladouceur, 2004; Ladouceur et al., 2003; Sylvain et al., 1997, as cited in Blaszczynski et al., 2008). Further, efforts to increase understanding and awareness of gambling concepts such as odds, myths, risks, and safe play strategies have been included in recent responsible gambling frameworks aimed at consumers, including Hing's definition of Responsible Consumption of Gambling (RCG), which includes "informed choice" (2018), and Wood and colleagues' Positive Play Scale (PPS), which includes a "gambling literacy" subscale (2017).

Fortunately, this is an area where stakeholders, particularly operators, have dedicated significant resources. In recent years, the trend has been for operators to develop branded, professionally designed and engaging resources (e.g., videos, tutorials, and tools) to educate all gambling consumers on concepts and help resources. Programs such as British Columbia Lottery Corporation's (BCLC) GameSense and Ontario Lottery & Gaming's (OLG) PlaySmart provide "umbrellas" for player information and resources that are posted online, at retail lottery locations, and at information centres on or near the gaming floor in land-based gambling venues. Increasingly, operators are either opting to use one of these recognized and well-developed branded programs, or creating similar programs to achieve informed play objectives.

### PROVEN IMPACTS & EFFECTIVENESS

Evidence on the effectiveness of education and awareness initiatives is mixed, demonstrating some positive impacts but also concerns as to whether increased information and understanding on gambling concepts leads to behavioural change. One of the clearest sources of evidence on the impacts of informed play efforts as described above, are researcher-led evaluations of these programs. Key findings from five evaluations of implemented programs in Canada and the US, conducted between 2006 and 2018, are summarized here.

A 2006 evaluation of Responsible Gambling Information Centres (RGICs) in Quebec found that when guests were informed about concepts such as randomness, they maintained that knowledge at a three-month follow-up, "but there had been no change in their gambling behaviour." (Canadian Partnership for Responsible Gambling-CPRG, 2010). Results of evaluating RGICs in Alberta similarly suggested that "increased knowledge was not shown to lead to behavioural change" (CPRG, 2010). RGICs in two Ontario casinos were evaluated in 2007, finding that guests rated centre staff and resources highly (CPRG, 2010). In 2016, the Responsible Gambling Council (RGC) published their review of Ontario's recently-enhanced Responsible Gambling Resource Centres (RGRCs). Key findings related to the centres' education and awareness objectives include:

- 90% of RGRC User Survey respondents indicate their visit to the RGRC resulted in increased knowledge;
- Half the RGRC users surveyed stated they were "very" or "extremely" likely to take some form of action after visiting the RGRC; these actions were mainly to tell someone about the RGRC or to think about their own gambling;
- Approximately one-third of RGRC users in the follow-up survey group had reduced their own gambling and/or set spending limits (RGC, 2016).

Most recently in 2018, Gray and colleagues evaluated the GameSense program at a casino in Massachusetts over a two-year period, generating extensive findings and recommendations. Most notably, results of their evaluation echoed those of previous work, whereby guests gained new gambling-related knowledge through interactions with staff and resources, but their behaviour was not likely to change as a result (Gray et al., 2018; 2019).

Further supporting the misalignment between knowledge and behaviour, in Parke and colleagues' (2015) article *Facilitating Awareness and Informed Choice in Gambling*, they include information related to the operation of games (e.g., probabilities) as one of the two types of information that is provided to players as part of harm minimization efforts. In support of such initiatives, they refer to Ladouceur and colleagues' (2002) work which "demonstrated this empirically by showing that problem gamblers' behaviour could be moderated by correcting erroneous cognitions, misconceptions of probability, and likelihood of winning" (Ladouceur et al, 2002, as cited in Parke et al., 2015, p. 8).



However, they acknowledge that such efforts, while effective at increasing awareness, have not effectively been shown to modify behaviour (Hing, 2004, as cited in Parke et al., 2015). Additionally, the article refers to work demonstrating that increased awareness of probabilities, randomness, and general statistical knowledge and understanding did not correlate with sound gambling decision-making (Blaszczynski & Monaghan, 2010; Evans et al., 2004; Hertwig et al., 2004; Steenberg et al., 2004; Monaghan & Blaszczynski, 2007; Williams & Connolly, 2006, as cited in Parke et al., 2015).

### EVIDENCE GAPS

The clear weakness of education and awareness initiatives that emerges from the evidence is the inability to reliably and effectively change behaviours, despite achieving increased knowledge and understanding. This is a persistent theme across safeguard and prevention strategies, and will be further acknowledged in later sections of this paper. Analysis of factors and issues contributing to this misalignment, and potential solutions, present an important area for continued investigation.

### EVIDENCE-BASED POTENTIAL

As will be discussed in later sections of this paper, there is likely an opportunity to enhance education and awareness initiatives with evidence-based tactics for more effectively changing behaviours, including the importance of using personalized messaging that incorporates specific forms of information and feedback. Such strategies are related to and may be useful for updating or modifying existing education and awareness programs.

## SECTION 3: RESPONSIBLE GAMBLING TOOLS

Responsible gambling (RG) tools are offered by operators to help players self-monitor and self-regulate their gambling. Rather than an exhaustive review of available tools, this paper focuses on two categories of tools: limit-setting (time/money) and self-assessment tools.

These categories are selected because they are among the most common and accessible in both the online and land-based environments, and because of their somewhat unexplored potential for harm reduction. Current evidence on the effectiveness of limit-setting and self-assessment tools suggests the potential for positive impacts, but that the voluntary and passive nature of most tools diminishes their potential impact.

### LIMIT-SETTING TOOLS (TIME & MONEY)

For a description of tools that enable players to set monetary limits, Auer and colleagues (2020) offer the following categories:

- *Play limit*—this is the maximum amount of money (or time) that a gambler can play with (or for) at any given time.
- *Deposit limit*—this is the maximum amount of money that a gambler can deposit into their playing account at any given time.
- *Bet limit*—this is the maximum amount of money that a gambler can bet on a single game (or concurrent games).
- *Loss limit*—this is the maximum amount of money that a gambler can lose in any one session or sessions.

It is increasingly common for operators, especially online operators, to provide tools to set money limits. In a review of social responsibility practices at 50 of the most well-known online gambling sites, Bonello & Griffiths (2017) found that 45 sites (90%) offered tools to voluntarily set monetary spending limits.

### ***Proven Impacts & Effectiveness***

As part of their 2019 study of monetary limit-setting tools for electronic gaming machine (EGM) play, Tabri and colleagues conducted an extensive review of current evidence, including studies examining monetary limit-setting tools available through EGMs and online providers. Evidence indicated that players who set money limits (and are notified when approaching their limits) are more likely to gamble within their limits than those who do not set limits (Auer et al., 2018; Blaszczynski et al., 2014; Kim et al., 2014; Stewart & Wohl, 2013; Wohl et al., 2013, as cited in Tabri et al., 2019). However, extensive evidence also demonstrates that adoption of these tools is poor (Ladouceur et al., 2012, as cited in Tabri et al., 2019), with less than 2% of players found to use RG tools (Forsström et al., 2016, 2017; Nelson et al., 2008; Schottler Consulting & Hare, 2015, as cited in Tabri et al., 2019).

In 2013, Auer & Griffiths found that “voluntary limit setting had a specific and statistically significant effect on high-intensity gamblers,” based on their analysis of a random sample of 100,000 players registered with an online gambling website during a three-month period (Auer & Griffiths, 2013). Their study showed that “intense players specifically changed their behavior in a positive way after they limited themselves with respect to both time and money spent”, with monetary limits showing greater impact than time limits (Auer & Griffiths, 2013).

While several studies demonstrate effectiveness of monetary limit-setting tools, Tabri and colleagues also found evidence that “even when a limit is set, many players exceed their self-imposed limit” (Broda et al., 2008; Hing et al., 2015; Nelson et al., 2008; Wohl, Christie, Matheson, & Anisman, 2010, as cited in Tabri et al., 2019, p. 328).

### ***Evidence Gaps***

As noted in the previous section, the lack of ability to change behaviour (i.e. adherence to limits in this case) is a fundamental shortcoming of limit-setting and other RG tools. A repeated theme throughout this paper will be the need for additional work on examining and addressing the difficulty in effectively influencing gambling behaviour.

### ***Evidence-based Potential***

Evidence on the impacts and effectiveness of limit-setting tools suggests that the key weaknesses are user uptake and non-adherence to limits once set. As these tools have otherwise proven to deliver positive impacts through a relatively simple method, it is worth considering how these two shortcomings can be addressed. As noted above, factors that contribute to non-adherence may be a worthy priority for further research.

To increase uptake and use of tools, certain jurisdictions have experimented with incentivizing tools, including limit-setting, in innovative ways. In 2016, the Massachusetts Gaming Commission's (MGC) PlayMyWay program offered users \$5US to enrol in a play management tool, which prompts users to set limits, track spending, and receive notifications when approaching limits. The registration incentive resulted in increased enrolment rates sustained over 17 months (MGC, 2017). Using a different approach but with similar objectives, Finland's state gambling agency implemented a "gamification" strategy in 2015 with the launch of Veikkaus Points, a pilot reward program that offered users points for engaging with behaviour tracking tools and educational resources. According to Veikkaus, the pilot program engaged more than 50,000 customers in its earliest stages, who were able to explore new products and services, as well as responsibility themes (Veikkaus, 2015). There may also be room for greater support and resources surrounding the use of tools. For example, in discussing how players can be better protected, Nower proposes that tools such as time and money limit-setting be accompanied by educational components that guide users through their set-up and use, such as how to gauge appropriate limits (Nower, 2018).

Such enhancements to current offerings of RG tools may present straightforward yet effective ways of increasing their effectiveness.

## **SELF-ASSESSMENT TOOLS**

Many gambling operators offer self-assessment tools in land-based information centres or kiosks and online. These tools are generally described as ways for consumers to find out if they are at risk of a gambling disorder or gambling-related harm. While many of these tools are based on existing instruments that are used to measure gambling problems (e.g. the CPGI), they generally ask users about their gambling habits and any negative consequences of their gambling, such as financial or relationship strain. In some cases, users are provided with results immediately that may include advice on what to change, or how and where to get help.

### ***Proven Impacts & Effectiveness***

Evidence on the effectiveness of self-assessment tools, generally and especially as offered through gambling providers, is seriously lacking. However, research examining the value of self-monitoring generally is drawn upon here. In Parke and colleagues' article *Facilitating Awareness and Informed Choice in Gambling* (2015), they make the case for self-assessment tools, citing research demonstrating "that a large proportion of individuals have reduced levels of self-awareness of behaviour when gambling, through a process of dissociation (Powell, Hardoon, Derevensky, & Gupta, 1996) and narrowed attention (Diskin & Hodgins, 1999)" (Parke et al., 2015, p. 7), which often results in increased irrational decision-making (Dickerson, 2003, as cited in Parke et al., 2015). To effectively address this phenomenon, evidence indicates that providing information in a way that stimulates self-evaluation and, most importantly, emphasizes personal relevance is essential (Monaghan & Blaszczynski, 2010b; Wolgater, 2006, as cited in Parke et al., 2015). Self-assessment tools have the unique capacity to reflect these two vital elements of increasing self-awareness, leading to more rational decision-making.

In two recent reviews, a systematic review (Marchica & Derevensky, 2015) and a meta-analysis (Peter et al., 2019), researchers examined studies that provided participants with personalized feedback based primarily on their answers to assessment instruments, and in some cases in response to their actual gambling behaviour. These reviews conclude that providing personalized feedback in response to self-reported gambling beliefs and behaviours

can have positive effects. For example, the systematic review showed positive effects such as decreases in frequency and in the amount of time and money spent, as well as improvements in the perception of actual norms for amount of time and money spent gambling (i.e. baseline perceptions were greater than the actual norms, but decreased to more accurate estimates after the intervention) (Marchica & Derevensky, 2015). The more recent meta-analysis showed efficacy was greatest for those with a more severe gambling disorder and when paired with motivational interviewing (Peter et al., 2019).

### ***Evidence Gaps***

Unfortunately, there is currently very little evidence examining the use and effectiveness of operator-provided self-assessment tools. Given the promising potential demonstrated in related evidence, further investigation of these tools specifically may be useful in determining their true value and most effective features, particularly their capacity to influence behaviours.

### ***Evidence-based Potential***

A clear shortcoming of these tools that has been identified is their passive delivery of results and remediation. In their 2018 report for BCLC, Glynn and Choi performed a review of the eight most widely used online RG tools that include a self-assessment functionality, finding that only one tool provided feedback and results proactively. The majority of the reviewed tools required users to retrieve results from various locations in their accounts, which in some cases may be difficult to find, requiring multiple clicks through several pages (Glynn & Choi, 2018). None of the tools provided relevant remedial advice.

In terms of remedial advice, Parke and colleagues emphasize the need for personally relevant information, “framed in a way that instils autonomy and assists a player in their decision-making as opposed to overly paternalistic information that is likely to be received negatively” (Parke et al., 2015, p. 14). This suggests that data, such as net expenditure or time spent gambling, “has personal significance to a player, and therefore is seen as relevant information aimed at facilitating informed and rational gambling decisions, and as such, is more likely to affect behaviour” (p. 14).

Modifying self-assessment tools to provide immediate results, including personalized and actionable feedback (e.g. directing to limit-setting tools) that is “pushed” to users rather than needing to be retrieved, may provide a simple way of enhancing this tool’s effectiveness.

## SECTION 4: CASH & CREDIT POLICIES

The ways in which consumers access funds to gamble is gaining increasing attention in responsible gambling efforts. Technological innovation is constantly providing new and innovative methods to circumvent traditional safeguards. Thoughtful policies surrounding acceptable methods to finance gambling and related protocols, as seen in a number of jurisdictions worldwide, can help to mitigate or prevent behaviours that often lead to overspending and financial harm.

The two most obvious cash and credit policy areas operators can target are on-site access to personal credit (i.e. credit cards) and the provision of house credit. While these two forms of providing access to funds for gambling may have different implications for operators (e.g. operational risk), the potential impacts of gambling using personal (i.e. bank) or house credit for players and their affected others are largely the same. For this reason, evidence on impacts, gaps, and potential is examined in combination, rather than divided across the two policy areas.

### PROVEN IMPACTS & EFFECTIVENESS

Research on the impacts of cash and credit policies is in early stages. Players' access to and use of various forms of funds have only recently received considerable attention as responsible gambling efforts. To date, the most compelling form of evidence in this area is on the strong relationship between the use of personal credit to gamble and problem gambling. An Australian study conducted by the Australian Institute for Gambling Research (AIGR) in 2001 found that 69.6% of problem gamblers (as defined by a score of 10+ on the South Oaks Gambling Screen) and 32.5% of at-risk gamblers (SOGS 5+) used credit card cash advances "to gamble or pay gambling debts", compared to 0.7% of low-risk gamblers (AIGR, 2001). A 2008 study of Queensland, Australia gamblers found that 27.1% of problem gamblers (PGSI 8+) reported "sometimes, often, always" using "credit cards to get cash advances for gambling", compared to 6.6% of low-risk gamblers (Productivity Commission, 2010). Recently, an online study for the UK Gambling Commission, using a representative sample of 2,000 adults, found that "22% of online gamblers using credit cards to gamble are classed as problem gamblers – with more at some risk of harm" (UK Gambling Commission, 2019). These results suggest that liberal policies around on-site access to personal credit can have significant impacts, particularly on at-risk and problematic gamblers.

In regards to the provision of house credit, there is very limited evidence on the practice of operators providing, or players using, house credit to gamble. This is possibly due in part to the fact that users of house credit tend to be "high-rollers" – a subset of players that are not commonly considered at risk of harm. However, research currently in progress by Williams and colleagues using an online panel of 10,000 Canadian gamblers has found (to date) that 38% of players that claim to *lose* more than \$100,000/year are problem gamblers (as identified by the Problem and Pathological Gambling Measure), and 66% of players that claim to *win* more than \$100,000/year are problem gamblers. Further evidence demonstrates the level of harm experienced by "high-rollers" includes severe losses, crime, or death (Zeng & Forrest, 2009; Productivity Commission, 2010). This evidence suggests that offering house credit, even if mostly to "high-rollers," can contribute to increasing risk and harm for these players. Despite this lack of clarity and possible oversight of elements of risk, a review of house credit programs in Canadian, US, and global jurisdictions suggests these programs provide a greater level of control to operators for reducing risk (Glynn & Choi, 2019). That is, when operators provide players with access to their personal credit via on-site kiosks, ATMs, etc., they have control over the location of these machines and related protocols (e.g. withdrawal procedures, required interaction with staff, etc.), and some degree of control over withdrawal limits. However, when operators provide house credit, they have complete control over application and eligibility requirements, credit limits, and terms.

### EVIDENCE GAPS

As mentioned above, academic research examining the impacts of cash and credit policies is virtually non-existent. Studies to evaluate the impacts and effectiveness of policies targeting on-site access to personal credit, such as those introduced in Massachusetts, Australia, and the UK (further described below) would establish whether this is a promising priority for responsible gambling efforts.



Additionally, the limited evidence on the impacts of operators providing house credit makes the practice difficult to accurately assess. As mentioned above, although the majority of house credit customers may be qualified as “high-rollers,” this group of gamblers is not immune to risk and harm. Further analysis of house credit practices would help regulators and operators determine whether house credit programs do in fact provide greater control and, if properly implemented, offer a more responsible option for players seeking additional sources of funds.

### EVIDENCE-BASED POTENTIAL

Despite strong evidence demonstrating that the use of personal credit is associated with problematic gambling and harm (Australian Institute for Gambling Research, 2001; Australian Government Productivity Commission, 2010; UK Gambling Commission, 2020), there appear to be few policies to effectively restrict this behaviour. Some notable exceptions include Massachusetts and New South Wales, Australia, where the use of credit cards for all gambling-related transactions is prohibited. In Victoria, Australia, all card-based transactions are limited to \$200 per transaction and \$500 per 24-hour period. In January 2020, the UK Gambling Commission announced a ban on any businesses accepting credit cards for gambling transactions, with the exception of National Lottery tickets, effective in April 2020. The ruling was in response to two separate reviews into online gambling and industry social responsibility (UK Gambling Commission, 2020). The UK Gambling Commission’s CEO, Neil McArthur, discussed the regulator’s justification for the new ban:

Credit card gambling can lead to significant financial harm. The ban that we have announced today should minimise the risks of harm to consumers from gambling with money they do not have. Research shows that 22% of online gamblers using credit cards are problem gamblers, with even more suffering some form of gambling harm.

We also know that there are examples of consumers who have accumulated tens of thousands of pounds of debt through gambling because of credit card availability. There is also evidence that the fees charged by credit cards can exacerbate the situation because the consumer can try to chase losses to a greater extent (UK Gambling Commission, 2020).

This suggests that action on policies regulating the use of personal credit for gambling may be a promising strategic area where any improvements can have significant impacts.

In regards to house credit, there may be similar promise in compensating for policies restricting access to personal credit by providing heavily regulated house credit programs. Examples of such implementations can be found in several jurisdictions worldwide. Ontario’s four resort casinos are the only operators in Canada that extend house credit through a heavily regulated protocol with extensive application and approval requirements. Despite its program’s safeguards, OLG was heavily scrutinized in 2017 for a \$10M loss that resulted from defaulted house credit (Bruser, 2017; Cosh, 2017; Star Editorial Board, 2017), demonstrating that it is important to consider the operational risk from a house credit program. An interesting structure in Australian jurisdictions offers house credit only to foreign players through specific agreements; it is not permitted for Australian residents. In the US, the Massachusetts Gaming Commission (MGC) allows the extension of house credit with significant restrictions, including limiting the amount players can borrow to protect a minimum cushion of \$10,000 of their total credit worthiness, as well as having players authorize their “willingness to lose” the amount they borrow.

Evidence on the strong correlation between gambling on credit and risk of harm, as well as real-world implementations demonstrating the opportunity for greater safeguards, suggests cash and credit policies require renewed and ongoing vigilance. This is an area likely to be a growing concern in the future responsible gambling landscape, as technological innovation continues to outpace policy and research in this area.

## SECTION 5: IDENTIFYING RISK BEHAVIOUR

While operators should aim to reduce harm for all gamblers, targeted efforts to more effectively identify the subset of players exhibiting risk must also be included. Methods for identifying risk vary widely across operators, and across the land-based and online environments. However, in nearly all cases, some form of player analytics is used. Predictive analytics is the most widely used form of player analytics, but alternative sources for identifying risk include payment and communication-related indicators.

### PLAYER ANALYTICS

Predictive algorithms are the most common form of player analytics, and have increasingly been used to identify risk in both online and land-based environments. These models may use a combination of variables (e.g. demographics, behaviours), in most cases drawing on variables that have previously been demonstrated in high-risk individuals (as determined by proxies such as PGSI scores, self-exclusion status, etc.).

#### ***Proven Impacts & Effectiveness***

Algorithms have been demonstrated to effectively identify high-risk behaviour. In a series of well-known studies by a group of researchers from Harvard's Division of Addiction (DOA), predictive models were shown to reliably identify the most problematic online gamblers (Braverman & Shaffer, 2010; Braverman et al., 2013; Broda et al., 2008; Gray et al., 2012; Labrie et al., 2007, 2008; Labrie & Shaffer, 2011; LaPlante et al., 2009; LaPlante et al., 2014; Nelson et al., 2008). These were the first published studies to use real gambling behaviour to develop models or algorithms that successfully identified players at risk.

Several studies have built on that DOA work. Most studies confirm the variables that were identified, and some add new powerful variables such as theoretical loss (total bet x house advantage) as an alternative measure of monetary intensity (Auer et al., 2012, Auer & Griffiths, 2014), "sawtooth" (intervals of increasing wager size followed by rapid drops) and number of games as a measure of time spent (Adami et al., 2013); and net losses (Dragicevic, 2013). In 2016, Percy and colleagues established session time as a strong predictive variable along with the DOA's original four.

However, evidence has also suggested important challenges for predictive algorithms in terms of their accuracy and transparency (Luquiens et al., 2016; Percy et al., 2016; Philander, 2014). For example, in their validation of a predictive risk model for online poker players, Luquiens and colleagues (2016) describe some of the challenges faced in operationalizing predictive algorithms. The results of their study are summarized in Figure 1 below and provide a reasonably representative example of challenges, even when researchers are successful in developing a player risk algorithm.

**Figure 1**
*Variables and Thresholds for a Luquiens Predictive Algorithm*

	Proxy for risk = PGSI score > 5	
Algorithm	stepwise logistic regression	Thresholds
Variables	sex	male
	age	< 28
	multi-tabling in the last 30 days (yes/no)	yes
	compulsivity (yes/no) (defined by 3+ deposits in 12 hours)	yes
	amount of total deposit in the last 30 days (euros)	> 0€
	mean of loss per gambling session including the rake (euros)	> 1.7€
	total loss in the last 30 days including the rake (euros)	> 45€
	total stakes (euros)	> 298€
	number of gambling sessions in the last 30 days	> 60
Sensitivity	80%	
Specificity	49.3% (i.e., 50.7% false positives)	

Key challenges include:

- Variables are not actionable; for example age and sex are not (generally) modifiable, and other variables, such as “mean loss per session,” are difficult to translate into remedial action or advice to the player.
- Some of the thresholds are not defensible; for example the “amount of total deposit in the last 30 days is greater than 0 Euros.” This means 100% of players who make a deposit in a 30-day period would trigger this variable.
- Some variables are actionable; for example, players making more than three deposits in a twelve-hour period or having more than 60 gambling sessions in 30 days are likely exhibiting some loss of control whereby remedial advice or action could be taken by the operator. However, both could potentially be used as standalone indications of risk for which an appropriate response or alert to the player could be issued.

Another important issue with predictive algorithms is the challenge in balancing sensitivity with specificity. Model sensitivity refers to the ability of the algorithm to successfully identify the target group (in the Luquiens study, those players with a CPGI score of >5); while specificity refers to the ability of the algorithm to exclude people outside the target group (players with a lower CPGI score). The smaller the target group is in relation to the overall population, the more difficult it can be to build a model that is sensitive enough to find the small target group while not accidentally capturing large chunks of the rest of the population (called “false positives”). Because most predictive algorithms in the gambling field are searching for the small group with gambling disorders, it is nearly impossible to do so without many false positives. As Luquiens points out, in order to build a model sensitive enough to identify a

high percentage (80%) of the target players who are at-risk, they must sacrifice specificity at the low level of 49.3%, meaning the model would result in more than 50% of false positives (i.e. players whose CPGI scores are below 5).

### ***Evidence Gaps***

Predictive algorithms are one area that has been relatively well explored. Aside from continued work on refining variables and identifying the most effective types of algorithms to perfect the sensitivity-specificity balance, there are a few obvious gaps in evidence.

However, there may be room for further exploring the use of specific behaviours (such as those identified in work on predictive algorithms) in combination or in place of predictive algorithms. This approach may present a simpler and actionable method of identifying risk, and is briefly introduced below.

### ***Evidence-based Potential***

Issues of accuracy and transparency in the use of predictive models contribute to a lack of actionability because gamblers cannot be made aware of the behaviours they need to change. Further, predictive models' use of gambling disorder or self-exclusion status as the dependent variable is not consistent with the goal of reducing harm for all gamblers. The evidence suggests that the development of algorithms can be improved, perhaps in part by reconsidering the target population, to include a larger group that is exhibiting well-proven risk factors but not necessarily experiencing a gambling disorder.

In addition, one of the most important contributions of the work to develop these models may be the extent to which they have identified information that can greatly improve our understanding of those who are at-risk. For example, the work performed by DOA researchers cited above consistently found four indicators that accurately identified risk in online gamblers: frequency; variability (across wager amounts); trajectory (increasing wager sizes); and intensity (Braverman & Shaffer, 2010; Braverman et al., 2013; Broda et al., 2008; Gray et al., 2012; Labrie et al., 2007, 2008; Labrie & Shaffer, 2011; LaPlante et al., 2009; LaPlante et al., 2014; Nelson et al., 2008). Rather than be obscured as variables combined with numerous others in a non-transparent predictive model, these single behaviours could effectively be used as individual indicators that trigger targeted responses as they occur (e.g. targeting players in 95<sup>th</sup> – 99<sup>th</sup> percentile for session length, expenditure, frequency, etc.). Supporting this approach in the land-based environment, in their 2018 review of identifying risk, Delfabbro and colleagues found that simple, “visible” behaviours – including intensity and frequency; loss of control; frequent attempts to access funds; and unusual social behaviours – could reliably indicate risk and harmful gambling (Delfabbro et al. 2007, 2016; Hafeli and Schneider 2006; Schellinck and Schrans 2004; Thomas et al. 2013, as cited in Delfabbro et al., 2018). Targeting such specific behaviours can increase transparency (players can understand which behaviours have been flagged) and actionability (players can understand what to change), which increases overall effectiveness.

Finally, work on predictive algorithms and player analytics generally has led to more clearly defined behaviours or other variables that can be used to identify risk, and has enabled researchers to see patterns or trajectories of play that lead to gambling disorders, potentially enabling earlier interventions in those trajectories. In this way, the development of predictive algorithms could be more widely shared, understood and applied to inform initiatives across the spectrum of safer gambling strategies.

## **ALTERNATIVE SOURCES**

In addition to the more traditional target behaviours discussed above, recent evidence suggests the effectiveness of exploring alternative sources for signs of risk, including payment- and communication-related behaviours. These sources of risk behaviour are in the conceptual stage, and are discussed strictly in the context of offering evidence-based potential.

### ***Payment Indicators***

Extensive evidence demonstrates that certain key behaviours related to on-site access to funds for gambling are associated with risk and harm. Key risk-associated behaviours include using credit card cash advances to gamble (Australian Institute for Gambling Research, 2001; Australian Government Productivity Commission, 2010) and withdrawing funds on two or more occasions in one session (Delfabbro, 2007, 2016; Hare, 2009; Hing, 2016).

Haeusler provides further support for payment-based indicators in his 2016 study on using online payment behaviour to predict self-exclusion, which found behaviours including declines, the use of multiple cards, and the use of micro-transactions, were positively associated with self-exclusion (Haeusler, 2016). Such payment-related behaviours could be incorporated into risk identification strategies, and corresponding mitigation and response strategies, relatively easily.

### ***Communication Indicators***

Work by Haefeli and colleagues (2011) introduced the concept of using gamblers' email communications to identify risk, based on characteristics such as tonality and frequency of contacts, and email content such as "Request for account reopening," "Financial transaction" and "Account administration," which were shown in their pilot study to predict future gambling problems. Following up on this work, in 2015 the authors proposed flagging email communications based on specific words that were found to predict self-exclusion. Target words fall into three scales: anger (e.g., "hate", "annoyed"), time (e.g. "end", "until"), and causation (e.g., "because", "hence"), which were found to occur more frequently in email communications of self-excluders than in those of study controls, in scientific articles, blogs, and novels.

Further building on this concept, Haeusler (one of the authors of the 2015 study), has developed an escalating scale of communication-based indicators, requiring escalating forms of response:

- **Level 1:** expressing interest in player protection, ideation related to mystical thinking, emotional or aggressive language, or urgency.
  - **Response:** focus on informed choice; direct to operator policies, RG tools, educational resources.
- **Level 2:** displaying evidence of loss of control or losing control (e.g. referring to overspending, inability to pay bills), or of gambling under the influence.
  - **Response:** conduct welfare check through personal contact, provide support if needed.
- **Level 3:** referring to current or previous manifest consequences (excessive debt or financial strain, previous treatment for addiction, relationship breakdown), combined with denial of responsibility.
  - **Response:** require mandatory break in play, self-exclusion; refer to external help resources, possible immediate referral.

(Haeusler, 2018)

Incorporating additional, innovative, yet straightforward sources of behaviours will ensure operators remain prepared to effectively monitor and identify risk now and into the future.



## SECTION 6: RESPONDING TO IDENTIFIED RISK

Responding to risk is equally important as identifying risk, yet many initiatives are less developed in this area. One of the most widely used response strategies is messaging, which may be generated in response to specific behaviours (e.g. notification of exceeding operator-established thresholds for frequency, spend, number of spins, duration, etc.) or in combination with limit-setting tools (e.g. notification of approaching/exceeding self-imposed limits).

### PROVEN IMPACTS & EFFECTIVENESS

In their review of pop-up messages on electronic gaming machines (EGMs) in a real-world environment, du Preez and colleagues found that “[a]mong gamblers who reported seeing pop-up messages, half read the message content, and a quarter believed that pop-up messages helped them control the amount of money they spend on gambling” (du Preez et al., 2016, p. 1,115). Kim and colleagues had similar results in a laboratory study assessing effectiveness of pop-up messaging related to time limits: “As predicted, participants who were explicitly asked to consider setting a time limit on their EGM play were significantly more likely to do so and spent less time gambling than those who were not given such instructions” (Kim et al., 2014, p. 266).

Much research has focused on determining characteristics of message content that may increase effectiveness. In a 2018 study on the effectiveness of warning messages to reduce gambling intensity, Armstrong and colleagues found that “messages need to be tailored appropriately to the consumer’s characteristics to be effective. Messages that do not consider the individual needs of the consumer may increase gambling intensity and therefore fail to be an effective harm-minimization tool” (Armstrong et al., 2018, p. 67). Additionally, in focus groups testing response messages for specific cohorts conducted by Gainsbury and colleagues (2018), clear differences were found in the types of messaging that appealed to each surveyed group (young adults, older adults, frequent gamblers, skill game gamblers).

In two related studies examining the effectiveness of pop-up messages on online slot machines, Auer and colleagues found that a simple, informative message prompted by exceeding 1,000 plays led to nine times more players ceasing their gambling session versus players who did not receive a message (Auer et al., 2014). In a follow-up study, Auer & Griffiths (2015a) compared the impacts of a simple pop-up with an enhanced message that included normative and self-appraisal feedback. They found the enhanced message led to twice as many players ceasing their sessions (Auer & Griffiths, 2015a). The work of Parke and colleagues (2015) further supports the need to consider message content. Specifically, evidence reviewed in their article identifies the value of information that stimulates self-evaluation and personal relevance (Monaghan & Blaszczynski, 2010b; Wogalter, 2006, as cited in Parke et al., 2015). They additionally point to work by Monaghan & Blaszczynski (2010a, as cited in Parke et al., 2015), which finds that complementing self-evaluation content with prompting alternative behaviours (e.g. taking a break) is more likely to be well-received as it promotes autonomy and self-awareness, rather than cessation.

### EVIDENCE GAPS

Despite evidence of strong potential, automated response strategies such as messaging share the same weakness identified throughout this paper. Monaghan & Blaszczynski (2010) review a number of studies examining pop-up messaging, finding that while evidence demonstrates they are effective at correcting erroneous cognitions and biases, there is little evidence to indicate their ability to change behaviours. Further investigation into causes and solutions to the issue of behaviour change would greatly benefit the full spectrum of safeguard and prevention initiatives.

## EVIDENCE-BASED POTENTIAL

Parke and colleagues (2015) propose an additional characteristic that shows promise for enhancing the likelihood of impacting behaviour. With limitations, they find that when provision of information (such as in the form of a message) interrupts the gambling task, especially when it includes self-appraisal content, it can be “relatively effective in moderating gambling behaviour” (Floyd et al., 2006; Monaghan, 2009; Monaghan & Blaszczynski, 2010a; 2010b; Schellink & Schrans, 2002, as cited in Parke et al., 2015, p. 11). However, as noted, the authors acknowledge important methodological limitations with their finding and recommend further empirical research.

While automated responses such as messaging have proven use in risk response strategies, evidence increasingly suggests the value of incorporating innovative interventions with players displaying risk.

A review conducted by Price Waterhouse Cooper (PwC) of real-world responsible gambling policies and procedures used by online gambling operators in the UK, found that many operators monitor and flag customers based on customer service phone calls. The same report found that some operators go as far as reviewing the social media and online profiles of flagged customers to assess their income and familial situation (PwC, 2016) and help determine whether and which intervention may be needed. In another real-world example, Swedish state operator Svenska Spel launched a pilot project in 2017 contacting 70 high-risk players by phone to inform them about their gambling habits. They found these gamblers had a poor understanding of their spending and appreciated the information. Svenska Spel has now implemented the initiative permanently, following the lead of Norway’s Norsk Tipping who have operated a similar initiative since 2014 (Männer, 2018).

While they may appear overly intrusive, such strategies show promising potential for earlier, meaningful interventions for players exhibiting repetitive risk behaviours, but not yet requiring drastic action such as self-exclusion or referral to help resources.

## SECTION 7: FUTURE-PROOFING THE INDUSTRY

A repeated theme throughout this paper is that individual tools and campaigns show usefulness in driving awareness and education of gambling risks and harm, but the fundamental shortcoming is their lack of ability to change behaviour.

While operators have responsibility to reduce harm to their customers, regulators may be better positioned to reduce harm to affected others. The challenge for regulators is to establish leadership in key areas that will support and facilitate the efforts of operators. The emphasis for regulators is on macro initiatives that do not rely on individual operators to step far ahead of the competitive environment, and which encourage a more consistent direction internationally to continuous improvement, while reducing regulatory burden.

As discussed in Section 4, evidence suggests that risk increases when credit is used to finance gambling – particularly the risk of experiencing financial harm – and that regulators worldwide have begun taking meaningful actions to combat this risk.

External standards and guidance on research may solve some of the challenges researchers and operators face in exploring, pilot testing, and evaluating safer gambling initiatives, and in testing the safety of their products and services. International standards have the potential to protect the integrity of researchers, meet the knowledge needs of the gambling industry, and continue to build understanding in the broader field.

In their 2019 book, “Responsible Gambling: Primary Stakeholder Perspectives” (Shaffer et al., 2019), the editors offer a set of considerations for researcher-industry collaboration, with properly formulated research methods to assess the impact of tools, policies, and programs to support player health. They suggest six dimensions to be considered to determine impact of safer gambling efforts. These considerations, if undertaken in advance of introducing new initiatives, may represent a foundation for rigorous research standards.

While regulators can provide leadership, gambling operators interact directly with players and can therefore have the most direct impact on harm reduction through operator-developed policies and initiatives for both online and land-based play. Where regulators may arguably have the most direct responsibility for reducing harm to affected others through policies such as third-party exclusion, operators can have the most impact on gamblers themselves, which will indirectly reduce negative impact on affected others.

Financial harm is shown to be the foundation of other harms (Hilbrecht & Glynn, 2019) and limit-setting tools are proving to be effective at mitigating this harm. Despite this, there is a lack of evidence indicating these tools lead to changed behaviour. Questions still remain around the best way to offer these tools, such as when, how and how often to offer limit-setting tools, should they be voluntary or mandatory, and can their use be normalized.

Self-assessment tools open a window to communication with players, but research suggests they may not lead to behaviour change. More needs to be done to identify the best way to provide self-assessment scores in real time, and to follow up with relevant tips and support.

Health and social services fields have successfully used incentives to increase uptake of healthy behaviours or to stop unhealthy ones, such as getting inoculations, quitting smoking or other drugs (Giles et al., 2014; Lynagh et al., 2011; Mantzari et al., 2015; Sutherland et al., 2008). This suggests the gambling industry could see success here, potentially by incentivizing positive play behaviours, such as: engaging with educational resources; enrolling in and/or using RG tools; completing self-assessments, and receiving advice on remedial action; and completing self-exclusion terms without breach.

There’s been promising evidence surrounding the effectiveness of using player analytics and predictive algorithms to identify patterns and behaviours that may indicate risk. More work needs to be done to identify single behaviours, such as session length, number of plays, spend, frequency of exceeding limits, etc., that could effectively identify extreme play and risk behaviours. Operators also need to ensure player analytics are used in more transparent and actionable ways.

And while evidence is showing effective ways to predict risk, more research is needed around how to respond or intervene when risk is identified. Research surrounding response and intervention strategies shows promising

potential, especially when the content and delivery of the message is tailored to the customer's needs; however, more research is needed to identify how these tools can have a greater impact on changed behaviour.

## CONCLUSION

This paper provides an overview of evidence to assess and revitalize safer gambling efforts, with a view to better anticipate, recognize and mitigate the potential negative impacts of gambling.

Future-proofing the industry requires converging efforts from operators, regulators and gambling consumers to reduce harm from the provision of gambling, with practical strategies that target all gamblers, gamblers who exhibit risk, and affected others. Evidence shows the most efficient and effective method of accomplishing this evolved goal is to focus on financial harm. This will require regulatory leadership and operator innovation beyond the traditional boundaries of responsible gambling initiatives. It is hoped this paper stimulates discussion and, more importantly, bold action to make gambling safer for all.

## QUESTIONS FOR DISCUSSION

1. **To better protect affected others, particularly children and families, should the industry consider more widely adopting third party exclusion programs?**
2. **How can evidence-based safe gambling practices (SGPs) be encouraged and supported across all initiatives?**
3. **How can initiatives be more effective at changing behaviours?**
4. **What can be done to assert the principle that gambling on credit is strongly associated with risk and harm, and discourage its use?**
5. **If the use of credit for gambling is permitted, what are some possible guidelines and protocols that can encourage responsibility?**
6. **How can consumers be encouraged to more widely adopt responsible gambling tools?**
7. **What are the most efficient and effective ways of leveraging player analytics?**
8. **Should personal monitoring, interaction, and intervention play a larger role in safeguard and prevention programs?**
9. **What are the biggest priorities for research to support safer gambling for all?**

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