Needs assessment prepared for the Addictions Team, Ministry of Health

Gambling Harm Reduction Needs Assessment

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Glossary

ANU	Australian National University
AUT	Auckland University of Technology
Class 4	A class of gambling which is non-Casino EGMs
CLIC	Client Information Collection database where service providers record the interventions they provide
CPI	Consumer Price Index
DIA	Department of Internal Affairs
FTE	Full Time Equivalent
EGM	Electronic Gaming Machines, also known as gaming machines and pokies
HLS	Health and Lifestyles Survey
HPA	Health Promotion Agency
NGS	National Gambling Study
NZ	New Zealand
NZDep13	New Zealand Index of Deprivation 2013
NZRB	New Zealand Racing Board
PGSI	Problem Gambling Severity Index
SAAP	Stand Alone Progressive Prize – are a type of EGM, where the games contribute to incrementally increasing prizes that can only be won on that machine, and are also capable of winning a linked jackpot. They started to be introduced in 2010 (Cox and Hurren, 2017)
SGHS	Short Gambling Harms Scale – a new screening tool developed by Browne et al. (2017) which provides a broader definition of potential gambling harms and therefore increases the potentially affected population
TLA	Territorial Local Authority
TAB	Totaliser Agency Board – the statutory monopoly for sports and racing betting in New Zealand

Executive summary

Introduction

The Ministry of Health is the department responsible for developing an integrated problem gambling strategy under the Gambling Act 2003. The strategy must include public health promotion, services to treat problem gamblers, research and evaluation. It is also a legislative requirement that the process to develop the strategy includes conducting a needs assessment. The current strategy runs to 2019 and therefore requires refreshing or updating in 2018 for future years. This needs assessment will inform the next strategy.

The needs assessment will highlight any gaps between the research evidence, population needs, service provision and the goal of the Ministry's strategic plan. In doing so, the needs assessment informs service planning to produce an appropriate distribution of health services to promote health-gains and better outcomes for the population.

There are many types of gambling harm to consider when looking at gambling harm interventions

There is still some debate about the gambling harm, who is affected and how to measure it. The types of harms caused by gambling include financial loss, relationship difficulties, distress, cultural harm, reduced performance and even crime. Financial loss often causes or triggers subsequent other harms to gamblers and their families.

Financial losses experienced by gamblers consist mainly of losses to other (winning) gamblers, and losses to Government and the charitable sector. These losses are in principle subject to regulatory control and can be reduced directly by Government policy intervention.

Browne, Goodwin, & Rockloff, (2017) developed an alternate measure to the commonly used Problem Gambling Severity Index (PGSI) tool. The short gambling harms scale (SGHS) has the potential to identify a much broader segment of the population who are experiencing harm as a result of gambling.

It is difficult to establish a correlation between reduction of gambling venues and expenditure

Gambling venues are readily accessible across the country, and tend to be denser in areas with small populations or high deprivation. It is difficult to establish a correlation between reduction of gambling venues and expenditure. Limiting access has been a primary component of the approach to minimise harm, but there is no compelling evidence from the recent literature or analysis in this report that reductions in venues created through policies such as sinking lid have had an impact in New Zealand as yet. This could be in part due to the minimal reductions not sufficiently impacting on accessibility.

Gambling is widely available across the country

There is high participation of gambling in New Zealand which in part could be due to high availability. The total amount lost by gamblers has increased year on year over the last six years. Even when the total gambling expenditure is adjusted for inflation, 2015/16 still saw an increase in expenditure, following a general decreasing trend over the previous four years.

The DIA explain this is in part due to a number of new offerings across the sector. The largest growth was in casinos, and the lowest growth in EGMs.

EGMs are cited as the primary mode of gambling for treatment service users, with Lotto products next. Lotto is one of the most common forms of gambling, yet it is not often considered as such, and is frequently promoted through the media. Advertising can create acceptability about products or activities by normalising them which can pose a risk when those products could be potentially harmful. However gambling, unlike tobacco for example, is not harmful for all people who gamble, and some can conduct gambling safely which may not make it a candidate for 'plain packaging', like tobacco. Also some activities such as Lotto and sports betting are quite ingrained in the culture and so could still be 'promoted' through the media indirectly.

High deprivation and lower income households have higher levels of gambling therefore have the highest burden of gambling tax

Gambling tends to be more prevalent in lower income households and, the concentration of gambling venues tends to be higher in areas of high deprivation. This means that that gambling taxation and redistribution to community purposes tends to be regressive, i.e., placing a higher burden on the less-well-off. Some organisations take an ethnical stance to not receive funds from gambling sources.

EGMs are a primary cause of gambling harm for those in treatment

Half of the people receiving gambling intervention services in 2015/16, identified EGMs outside of casinos as a primary gambling mode, and a further 9 percent identified casino EGMs as their primary mode. The 2016 HLS found that almost half of respondents (49%) who played EGMs in a pub or club at least monthly experienced at least some level of gambling harm.

Characteristics of those that gamble linked strongly to mental health state and disorders

Gambling is linked with a number of mental health disorders ranging from alcohol and nicotine dependence, to behavioural disorders. Research with psychosis patients revealed they were four times more likely than the rest of the population to have a gambling problem. The research findings would seem to substantiate the need to screen for gamblers in other mental health and addictions services, as well as screening problem gamblers for other mental health and addiction issues.

In research aimed at youth (Rossen, et al., 2016, Rossen, Lucassen, & Fleming, 2016) it was found that those with co-existing mental health issues (e.g. depression and suicide attempts), other addictive/risky behaviour (e.g. use of alcohol and weekly cigarette smoking) and being in a sexual minority may also be at a heightened risk of problem gambling.

Gaming addiction has been recently defined by the World Health Organization as a mental health disorder. However, despite some structural similarities between gaming and gambling a recent study by Macey and Hamari (2018) found that games do not, in themselves, act as developmental pathways to gambling. Although the consumption of competitive gaming was found to be a more significant predictor of increased participation in gambling.

Online only gamblers are in the minority and so traditional intervention methods will still reach the majority of gamblers at this present time. However with technology continually evolving, and an increase in online gambling products, this is a space to watch closely.

Reach of gambling interventions in New Zealand are underrepresented in males and higher in Pacific People

The service utilisation analysis shows that males are under-represented in problem gambling services and Pacific people are more likely to access intervention services compared to other ethnic groups. The Gambling Helpline is a well-known resource and receives over 4000 calls per year. However there is limited data available as to who is accessing the service.

The Australian Productivity Report (2010) stated that less than 15 percent of people impacted by gambling would attend traditional problem gambling services. Without asking gamblers who do not receive treatment what help they need it is difficult to know how to reach them. Similar, investigating further into what is working for Pacific clients may offer insights into new models. There are also alternatives to traditional treatment services. Many gamblers who recognise they have a problem may adopt self-management techniques and tools from the internet (through provider websites or national public health campaign websites) or attend a peer support group. Consideration for alternative methods and options for accessing and treating problem gamblers, as well as supporting others that are harmed, should be considered.

Regional providers see half of all clients

Regional providers saw half of all clients, but not all regions have local service provision. In general, Māori and Pacific people are more likely to use regional (or cultural) services. This is particularly evident with Pacific gamblers, four-out-of-five of whom access services from regional providers. There is substantial variation in service use across the country, but this needs to be considered in relation to gambling prevalence to understand whether the absence of service utilisation is an issue or not.

We can learn from use of interventions and those that access interventions what improves access rates

The data show that Hastings, Porirua and Masterton have particularly high rates of service utilisation and they also have a high rate of gambling losses. There may be useful lessons to be learned from these areas in terms of how to engage people in problem gambling services. Areas such as Whanganui and Lower Hutt have lower service utilisation rates and high gambling expenditure.

Feedback from consumers who were in treatment said they found the service easy to access, and the majority rated the service good or excellent. Individual counselling was the most preferred intervention from a range offered. Feedback suggests that it depends at what stage the person is at as to how they want to engage with services. There may also be a need for more specific therapies to address the impact of gambling harm such as relationship counselling.

By the time people do reach out for treatment for problem gambling they are at crisis point.

Consumers report high use of the Gambling Helpline in the survey, but providers don't feel that they receive referrals from this source. A limited amount of demographic data is collected through the Helpline, which may hinder referring to the right local services.

Gambling harm intervention workforce finds challenges in contracting approaches and those in venues may not be as well supported or trained as they could be

The workforce cites that the current contracting mechanism limits providers ability to innovate (due to restrictions of FTE contracts), does not allow for culturally specific requirements (and the additional time and work this creates) and doesn't capture the breadth of work that they do.

Professionalisation of the workforce is a concept that is half supported, and half not understood. Gambling venue staff has a unique opportunity to minimise gambling harm with their pub or club patrons, however it's a role they are sometimes ill equipped to do. An assured level of training and quality and greater linkages to the service providers might better support them. Gambling host responsibility does not seem to be as embedded, or as effective as alcohol responsibility, likely due to a number of reasons.

The gambling sector is maturing and could work together more to prevent and treat gambling harm

There was general agreement by the gambling operators that the whole sector has matured over the last few years. It is now at a point where there are opportunities to work more collaboratively could improve how problem gamblers are identified and supported. The infrastructure agencies also see the opportunities to provide incentives to reward practices at venues that exceed the minimum standards such as extended licenses. The provider workforce is probably not at the same point currently, and will require convincing that working with rather than against the gambling industry may still deliver a better end result.

There is an opportunity to bring together the sector to more effectively use the full breadth of resources available across the sector.

Many opportunities to improve supports and learn

There are many opportunities to learn from best practice within New Zealand and create pilot service models to address service gaps. Work is needed to improve inter-sectorial relationships and make best use of the skills available within the industry as a whole to support those harmed by gambling. Below are just a few possible recommendations for further investigation:

1. Continue to fund research with a possible focus on youth, online gambling, and best practice approaches to treating problem gambling within a context of co-morbidities
2. Increase screening opportunities across the wider health and social service agencies in particular primary care and other mental health and addiction services
3. Consider whether new screening tools are more appropriate for New Zealand's public health approach such as the short gambling harms scale (SGHS) harm (Browne, Goodwin, & Rockloff, 2017)
4. Evaluate existing service provision for measurable outcomes and explore ongoing support and relapse within provider client population, and treatment for co-morbidities

5. Review and learn from those regional models which have high gambling expenditure and high service utilisation such as Hastings, Porirua and Masterton

6. Consider piloting new service models to address gaps in current service provision in areas such as Whanganui and Lower Hutt based on learnings from regional models and working in a co-design approach with providers, venues and consumers (including those consumers who are not receiving interventions)

7. Explore options for alternative interventions to reach broader populations who may not want to see a traditional service provider and how gamblers prevent and manage relapse

8. Ensure access / pathways to different types of interventions that may deal with specific harms such as relationship counselling

9. Work with Gambling Helpline to improve data collection and review referral processes

10. Work with the gambling sector to consider how venue staff are trained and supported to recognise gambling harm in a way which is effective and sustainable

11. While online gambling is small it is worthwhile considering how this may impact in the next 2-3 years as opportunities to gamble online from traditional providers (e.g. Lotto's online instant win and online offerings) increase

12. Improve the infrastructure that connects the gambling sector to:

    (a) Improve cohesion

    (b) Share best practice

    (c) Improve coordination

    (d) Increase transparency

    (e) Support all workforce including venue staff

    (f) Share learnings and data across wider sector such as mental health and other addictions

13. Work with service providers to ensure service contracting and data collection supports cultural service delivery and create opportunities for innovation

1. Introduction

1.1 A legislative requirement

The Gambling Act (2003) and the Racing Act (2003) set the legislative context for gambling in New Zealand. The Department of Internal Affairs is responsible for regulating the gambling industry. To minimise the potential for harm from gambling, the Ministry of Health has been appointed the department responsible for developing an integrated problem gambling strategy under the Gambling Act 2003. The strategy must include public health promotion, services to treat problem gamblers, research and evaluation. It is also a legislative requirement that the process to develop the strategy includes conducting a needs assessment. The current strategy runs to 2019 and therefore requires refreshing or updating in 2018 for future years.

This needs assessment will inform the next strategy.

1.2 Objective of the needs assessment

The objective of this needs assessment is to document how well the provision of intervention and treatment services to minimise gambling harm in New Zealand, aligns with the research evidence base and population needs. It highlights any gaps between the research evidence, population needs, service provision and the goal of the Ministry's strategic plan. In doing so, the needs assessment informs service planning to produce an appropriate distribution of health services to promote health-gains and better outcomes for the population.

1.3 Scope

This needs assessment is intended to inform the Ministry's next integrated problem gambling strategy; it contains an overview of the current gambling environment and problem gambling situation in New Zealand. It also documents advances in gambling research literature. The report outlines current treatment service provision, together with feedback from service providers, service clients and highlights any identified service delivery gaps.

Excluded from the scope of this needs assessment is an evaluation of the effectiveness of contracted treatment services or the performance of service providers.

1.4 Structure of this report

Section 1 – Introduces the scope and purpose of the report, and methodology

Section 2 – Introduces the key stakeholders and roles

Section 3 – Identifies the types of gambling harm and ways to identify the harm

Section 4 – Explores the availability of gaming venues across New Zealand including maps of four urban areas (Auckland, Hamilton, Wellington and Christchurch) as well as some provincial areas

Section 5 – explores the level and type of participation in gambling and some of the context for this such as advertising and the context of gambling

Section 6 – identifies from the research those characteristics of a typical gambler who is at risk. It also explores co-morbidities and any future trends that may impact on gambling / gamblers such as youth, the potential link between gaming and gambling, and online gambling

Section 7 – Explores the utilisation of the Ministry of Health's contracted services by different population groups, and alternative methods of interventions

Section 8 - Explores the utilisation of the Ministry of Health's contracted services by different regions, and providers

Section 9 – Presents a summary of the findings from the engagement undertaken with the sector. This includesfeedback form consumers, providers, the workforce, the infrastructure and the industry

Section 10 – Presents a summary of all the findings in the report and makes recommendations for action

1.5 Methodology

We used a variety of direct primary and secondary research methods to produce the data on which this needs assessment is based:

- Interviews with a broad range of stakeholders;
- A rapid scan of the academic literature since the last needs assessment;
- Two online surveys, targeting the provider workforce and its clients;
- A review of recent research projects by the Ministry of Health; and
- Extracted data from the gambling sector including service treatment, venues and expenditure data.

1.5.1 Stakeholder interviews

Interviews were conducted either face to face or on the telephone with representatives from the gambling industry, service providers, and infrastructure agencies such as the Ministry of Health, Department of Internal Affairs, and research organisations.

Sector	Organisation interviewed
Service Providers	• Hapai Te Hauora Tapui Ltd • Oasis Centre, Salvation Army • Odyssey House Trust • Problem Gambling Foundation • Asian Family Services • Raukura Hauora O Tainui

Sector	Organisation interviewed
	• Taeaomanino Trust • Te Runanga o Toa Rangatira
Gambling Industry	• The New Zealand Racing Board • New Zealand Lotteries Commission • Clubs NZ
Infrastructure	• Hapai Te Hauora – National coordination service and public health workforce development • Abacus – Clinical training provider • Ministry of Health – Gambling/Addictions Team, Telehealth • Department of Internal Affairs • Health Promotion Agency • Territorial Local Authorities – Auckland

1.5.2 Literature scan

A rapid and selective scan of recent literature published since the 2015 needs assessment was carried out and has informed the preparation of this needs assessment.

1.5.3 Limited online survey for providers and consumers

Two "Survey Monkey" online surveys were used to canvas feedback from the wider service provider workforce and consumers. The Ministry of Health contact for each provider was requested to circulate two separate survey links, one to the problem gambling workforce, and the other to their clients. To maintain anonymity, we did not ask the respondents to identify which organisation they worked for or received treatment from.

Workforce responses: There were 44 respondents to the workforce survey of which 26 were female (59%) and 18 were male (41%). The majority of responses came from Auckland (n=20), Hawkes Bay (n=8), Waikato (n=4) and Canterbury (n=4) and were aged between 35 and 64. Total response ethnicity selection was used where respondents could identify with more than one of the four broad ethnic groups and have been included in each group they identified with. The ethnicities that responded were European/ NZ European (n=25), Māori (n=14), Pacific (n=4), Asian (n=2) and Other (n=6).

Consumer responses: There were 58 consumer responses of which 33 were female (57%) and 25 were male (43%). There were 32 NZ European responses (46%), 22 Māori responses (32%), and a smaller number of Asian (9%), Pacific (6%) and Other respondents. Over half of the respondents were aged between 35 and 54, and the majority of respondents resided in Auckland (n=24), Bay of Plenty (n=8), Waikato (n=7) and Wellington (n=7).

The surveys have a number of limitations and the results should be treated as anecdotal, rather than representative feedback from the respondents:

- To minimise the burden on the providers, we did not ask for confirmation of the number of surveys that were sent out to clients; therefore, we do not know the response rate;
- Some providers did not have, or want to use, client's email addresses for this purpose;
- The responses are self-selected and there was no follow-up with non-responders;
- As a result, it cannot be assumed that the survey is based on a representative sample of the underlying population of interest as there may be some self-selection bias; and
- The number of respondents was very small, particularly in sub-samples.

1.5.4 Research projects funded by Ministry

We have also reviewed several research projects funded by the Ministry of Health and completed since 2015 which were not covered in the previous needs assessment.

1.5.5 Data reviewed was from a wide range of sources

- Addresses of gambling venues were provided by the NZ Lotteries Commission and the NZ Racing Board; addresses of casinos and class 4 electronic gaming machine venues were retrieved from the DIA website. Class 4 EGM venue information included the number of machines at each venue. Locations of gambling venues were mapped using the QGIS application.
- Expenditure on the four main types of gambling was retrieved from the DIA website.
- We drew upon Homecare Medical Ltd.'s annual and quarterly National Telehealth Service reports for utilisation of the Gambling Helpline.
- Utilisation of Ministry of Health funded clinical intervention services was analysed using an extract from the CLIC database, a minimum data set to which providers are required to submit activity records.

2. Four main legal gambling types in New Zealand

The Gambling Act (2003) and the Racing Act (2003) set the legislative context for gambling in New Zealand.

There are four main types of gambling legally allowed in New Zealand:

- Sports betting through the TAB which is run by the New Zealand Racing Board (a statutory monopoly);
- Class 4 Electronic Gaming Machines ("EGMs", also known as "pokie machines") run through clubs, pubs and societies;
- The national lottery and associated products through the New Zealand Lotteries Commission (available at many supermarkets, petrol stations, local dairies and other retail outlets); and
- Casinos.

In 2015/16 over $2.2 billion was spent on gambling in New Zealand[1].

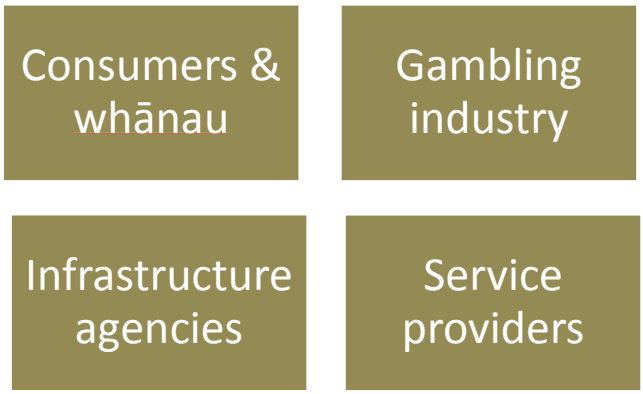
The gambling industry serves both non-commercial as well as commercial interests. Of particular importance are the interests of the charitable community sector which receives very significant contributions (approximately $654 million in 2015/16) from all forms of gambling. There is a natural tension between the interests of the charitable sector which benefits from gambling – including harmful gambling – the interest of gamblers, and the interest of parties engaged in reducing and minimising gambling harm.

2.1 Stakeholder analysis

There are four main stakeholder groups involved in the gambling sector: the service providers, the gambling industry, the infrastructure/agencies (including the Government) and consumers / whānau.

[1] https://www.dia.govt.nz/diawebsite.nsf/wpg_URL/Resource-material-Information-We-Provide-Gambling-Expenditure-Statistics

Figure 1 The Gambling Sector



2.1.1 Consumers and their whānau

Consumers are a key stakeholder group in this needs assessment. This group includes all consumers of legal gambling services in New Zealand and the people affected by their gambling. In this assessment we canvas opinion from consumers and their whānau who suffer gambling harm, (as opposed to gambling consumers) and who are clients of providers of services to prevent, reduce and minimise gambling harm.

2.1.2 The service providers

The Ministry of Health contracts with 19 providers to deliver services to prevent and minimise gambling harm. The contracts purchase workforce services in Full Time Equivalents ("FTE") to deliver a suite of intervention services such as brief, full facilitation, follow up and group services (see page 60 for further description). There are two 'mainstream' national providers and 15 regional providers, as well as two specialist service providers. The majority of providers (12) also deliver a public health component focussed on the five core components of: policy development, safe environments, supportive communities, awareness raising and effective screening environments. Two providers deliver clinical interventions only, and four deliver public health only.

These four public health providers operate in Auckland, Taranaki, Manawatu-Whanganui and Otago. For more detail on the contracted providers and their regions see Appendix 3.

The Gambling Helpline is also a Ministry of Health contracted provider through the National Telehealth Service, not the Addictions Team.

2.1.3 Gambling industry

The 'gambling industry' consists of four main providers of gambling services as outlined previously. Both the New Zealand Racing Board and New Zealand Lotteries Commission are statutory monopolies and operate their business through a range of venues in New Zealand (see section 4.2.1).

There are six casinos in New Zealand located in Auckland, Hamilton, Christchurch, Dunedin and two in Queenstown.

EGMs can be operated by clubs, pubs or societies. Clubs operate gaming machines in own premises and fund their own club or cause, many of these belong to Clubs NZ. There are 35

public societies[2] which operate gaming machines in commercial venues such as pubs and distribute profits through grants.

2.1.4 Infrastructure Agencies

Infrastructure agencies include the Department of Internal Affairs as lead Government Agency responsible for the Gambling Act, and the Ministry of Health as the Department responsible for minimising gambling harm. Training providers, research organisations, workforce development and national coordination services also fit in this category. Local government also have a role to play in developing local policy on gambling venues, such as limiting the number of new venues, and venue relocations.

There are conflicting interests within government: government as a whole has a significant fiscal interest in revenue from gambling ($131 million gambling levies in the year to November 2017[3], plus GST revenue on all gambling) and it also has an interest in a viable charitable sector which is less reliant on direct government funding; on the other hand, Government has a competing interest to reduce and minimise gambling harm.

The Ministry of Health's role includes a strategy for minimising gambling harm

The Ministry of Health is the 'responsible department' for developing an integrated gambling strategy as set out in the Gambling Act 2003. The legislation stipulates that a needs assessment is required to inform the integrated problem gambling strategy focused on public health. The following excerpt details what the Gambling Strategy needs to cover:

Box 1 Gambling Act 2003 Part 4 - Subpart 4—Problem gambling levy

Gambling Act 2003 Part 4 - Subpart 4—Problem gambling levy

317 Integrated problem gambling strategy focused on public health

An integrated problem gambling strategy must include—

(a) measures to promote public health by preventing and minimising the harm from gambling; and

(b) services to treat and assist problem gamblers and their families and whānau; and

(c) independent scientific research associated with gambling, including (for example) longitudinal research on the social and economic impacts of gambling, particularly the impacts on different cultural groups; and

(d) evaluation.

The prevention and minimisation of gambling harm have predominantly focused on restricting access to gambling venues or machines through licensing. This is managed by the

[2] https://www.dia.govt.nz/diawebsite.nsf/wpg_URL/Services-Casino-and-Non-Casino-Gaming-List-of-Society-Websites

[3] http://www.treasury.govt.nz/government/revenue/taxoutturn/tax-revenue-nov17.xlsx

Department of Internal Affairs. In conjunction, services provided by the Ministry of Health include:

- Population Health Approaches – local, regional and national;
- National coordination services;
- National helpline services;
- Screening in primary care and social service settings;
- Psychosocial interventions – both secondary and tertiary;
- Facilitation services (e.g., budgeting advice, alcohol and other drug services, Work and Income New Zealand services, housing services); and
- Follow-up services and motivational support.[4]

The current Ministry of Health Strategy to Prevent and Minimise Gambling Harm (2016) contains a nine year strategic plan 2017/17 – 2024/25, and a three year service plan 2016/17 – 2018/19 which includes the services priorities for the period. The overall goal is:

> *"Government, the gambling sector,[5] communities and families/whānau working together to prevent and minimise gambling harm, and to reduce related health inequities."*

This needs assessment will consider to what extent the current model is delivering on this goal and options for change in the future.

[4] http://www.health.govt.nz/our-work/mental-health-and-addictions/problem-gambling/problem-gambling-services

[5] In this context, 'the gambling sector' includes commercial and non-commercial gambling operators (including the NZRB and the NZLC), member associations such as Clubs New Zealand and Hospitality New Zealand, operators of gambling venues (including publicans and operators of retail outlets), providers of services to prevent and minimise gambling harm, and gambling researchers.

3. What is gambling harm?

3.1 Introduction

The Gambling Act 2003 defines harm as any kind of harm or distress arising from, or caused or exacerbated by, a person's gambling. This includes personal, social, or economic harm suffered by: the person, the person's spouse, civil union partner, de facto partner, family, whānau, or wider community, in the workplace, or society. However how the harm can be quantified and measured is still under debate. As the Ministry of Health's strategic goal is to reduce or minimise the harm caused by gambling, there needs to be agreement as to how what this measure is. In this section, we discuss the types of harms caused by gambling, who is impacted by them, and how those harms can be measured.

3.2 What is problem gambling?

There are two distinct approaches to defining "problem gambling": a medical model, and a public health approach.

The medical model defines problem gambling as a discrete disorder, which an individual either has or does not have. The medical model approach has several limitations:

- The model does not recognise that harm can occur without a person necessarily having the symptomology for qualifying as a problem gambler.
    - The symptomology of a problem gambler is defined in the DSM-5[6]. Nine factors are described as symptoms of 'a problem gambler'; a person must have four of the nine factors to be diagnosed.
- There is an emphasis on the individual who gambles, failing to take into account how gambling can affect families, friends, whānau and communities.
- The model fails to appreciate the complexity of problem gambling and how the manifestation of harms and the development of the gambling problems can vary between individuals.

In contrast, the public health model is focused on prevention and early intervention over the whole continuum of harm. The public health model recognises that people experience varying levels of harm from gambling and that there are costs and benefits to gambling for a society.

The Ministry of Health 'Strategy to Prevent and Minimise Gambling Harm 2016/17 - 2018/19' (2016) takes a public health approach to preventing and minimising gambling harm. They use a continuum of harm approach (based on the Korn and Shaffer 1999 model), recognising that people experience varying levels of harm from gambling and consider appropriate interventions along the spectrum.

The 'ANU review' (Rodgers, Suomi, Davidosn, Lucas, & Taylor-Rodgers, 2015) makes an important note about the Korn and Schaffer model and the continuum of harm approach –

[6] Diagnostic and statistical manual of mental disorders – definition provided at https://learn.problemgambling.ca/eip/assessment

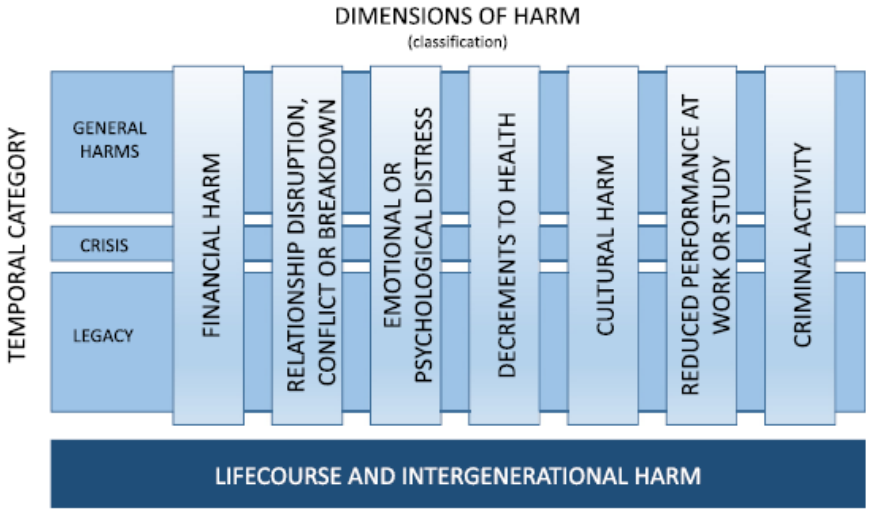
the original spectrum model showed two-way directional arrows between the different cohorts of gamblers. This reflected the likelihood of people to transit between states over time. These states are specified as no gambling, infrequent or light gambler, frequent or heavy gambler and problem gambler as well as pathological gambler. The continuum model linked to public health interventions does not imply movement back and forth between 'states' of gambling, but rather one directional towards 'unhealthy gambling'. Recent research, such as the National Gambling Study has tried to consider how and why a transition occurs, for example to prevent those with low or moderate risk becoming problem gamblers, and those who are recovering relapse. The issue of how an individual stays 'gamble free' and what happens when they relapse is still not well understood.

3.3 Defining and measuring harm

There is still much debate over what constitutes gambling harm and how best to measure it. Browne, Goodwin, & Rockloff (2017) researched gambling harms in New Zealand and state that there is no adequate measure to assess the harms associated with gambling behaviours and exposure. They state that this is, in part, due to an emphasis in gambling research on linking harm to problem gambling severity, and measures failing to illustrate the harms that occur beyond the individual.

Langham, Thorne, Browne, & Donaldson (2016) proposed a conceptual framework of gambling related harm that captures the full breadth of harms that gambling can contribute to (see **Figure 2**). They note that each domain will not contribute equally to the burden of harm, but suggest that each domain be investigated to ascertain its relative contribution.

Figure 2 Conceptual framework of gambling related harm



Source: (Langham, Thorne, Browne, & Donaldson, 2016)

The authors also propose a functional definition of gambling related harm:

> *"Any initial or exacerbated adverse consequence due to an engagement with gambling that leads to a decrement to the health or wellbeing of an individual, family unit, community or population."*

Browne, Bellringer, Greer, & Kolandai-Matchett (2017) agreed with this definition, but note it does not take into account the importance of whānau, so suggested changing "family unit" to "family and whānau" for the New Zealand environment.

3.4 Financial loss is a key driver of gambling harm

As Langham's conceptual framework usefully illustrates, there are many different dimensions to gambling harm. However, there is one component in this framework which warrants closer examination, both for its pervasive influence on other harm categories as well as because it can be influenced very directly by government policy: financial harm.

The nature of gambling involves a substantial re-distribution of money: all gamblers contribute money to a prize pool, but only a small minority of gamblers take winnings from the pool. Therefore, most gamblers experience a net financial loss; this loss is essentially the price the gambler pays for the entertainment value, for the excitement, the hopes and dreams.

For many gamblers, the financial loss is without particularly noticeable consequence, especially in the short term; however, for others, the financial losses can be highly significant relative to their disposable income and relative to other competing expenditure needs of the gambler and his family / whānau. Where financial losses and economic harm are significant, they often cause or trigger subsequent personal or social harm in one or more of the other harm categories set out in Langham's model. Sustained gambling losses can cause significant emotional distress, health problems such as sleeplessness or alcohol abuse, they can cause or contribute to relationship problems or breakdowns, or may indeed trigger criminal behaviour such as fraud or theft to recover losses.

Even where financial losses and associated gambling harms are not particularly significant at an individual level and in the short term, over time and in aggregate they may amount to substantial harm. Recent research has shown that the bulk of the aggregate harm accruing in the population is from individuals in the lower-risk categories of gambling, and from people affected by someone else's gambling (Browne, Bellringer, Greer, & Kolandai-Matchett, 2017).

The financial harm to which gamblers are exposed is, among other factors, a direct result of government policy choices. Firstly, financial losses and the number of gamblers who experience losses depend on the distribution and size of potential winnings among gamblers: the more skewed the distribution of winnings is towards a few very high prizes, the greater the number of gamblers experiencing financial loss. This is exemplified by games like Powerball Lotto: a tiny number of multi-million dollar wins and winners are set against millions of losers. Since its introduction in 2001, the NZ Lotteries Commission has steadily increased the maximum jackpot of Powerball from $15 million to $50 million, and correspondingly created ever increasing numbers of losers. As the DIA noted, the size of jackpots drives Lotto sales[7].

[7] www.dia.govt.nz/press.nsf/d77da9b523f12931cc256ac5000d19b6/3a06349360714c2ccc2580cf00823375!OpenDocument

Since the distribution and size of maximum winnings is subject to regulatory controls, government does have the opportunity to directly influence the number of gamblers who experience financial losses. For example, reducing the size of jackpots in Lotto games and increasing the number and size of smaller prizes would not only reduce the adverse re-distributive impacts among gamblers, it might well also reduce overall participation, and therefore reduce overall losses.

Secondly, government controls the "tax" proportion of gambling expenditure. By "tax" we refer both to the gaming duties of approximately $130 million which go directly into general government coffers as well as the $654 million which are taken from gamblers and re-distributed from gamblers to the wider community. If government reduces the amount of money taken from the gambling prize pool and thus, from gamblers' (and their families') pockets, then it will directly and immediately reduce the financial harm experienced, together with all the associated subsequent emotional, psychological, relationship and social harms.

3.5 How do you determine whether gambling is harmful?

For gambling harm service providers to identify harm, the tool most often used is the Problem Gambling Severity Index (PGSI). This is a screening tool with which people can assess themselves or others and which identifies certain risky behaviours such as gambling more money than intended and spending more time gambling than intended. Answers to the nine questions generate a score which can be categorised as non-problem gambler, low risk gambler, moderate gambler or a problem gambler.

The PGSI, a common gambling screening tool in use in New Zealand, is primarily based on an addiction-based model, rather than a public health approach to assessing gambling harm. Recent literature states that the measurement of gambling problems should not focus on addiction-like symptoms, but should focus on the negative consequences of gambling (Browne, Goodwin, & Rockloff, 2017). This perspective is aligned with a public health approach that recognises that the largest component of gambling harm in the community may be derived from the larger group experiencing less severe problems, rather than from the severely addicted gamblers.

Browne at al (2017) developed a short gambling harms scale (SGHS) to capture population-level harm based on feedback from 1,524 Australian individuals who had gambled in the last year. The resulting 10-item scale showed strong reliability, uni-dimensionality, external validity and measurement invariance. The authors suggest their scale can be aggregated to a population level to yield a sensitive and valid measure of gambling harm. Using the scale resulted in a prevalence of those experiencing harm twice that of the PGSI, relating to the observation that subclinical gambling can still result in significant harm. Using the SGHS, rather than the PGSI, would significantly broaden the segment of the gambling population that is considered "of concern".

The SGHS consists of the following items:

1. Reduction of my available spending money (Financial)
2. Reduction of my savings (Financial)

3. Less spending on recreational expenses such as eating out, going to movies or other entertainment (Financial)
4. Had regrets that made me feel sorry about my gambling (Emotional/ psychological)
5. Felt ashamed of my gambling (Emotional/ psychological)
6. Sold personal items (Financial)
7. Increased credit card debt (Financial)
8. Spent less time with people I care about (Relationships)
9. Felt distressed about my gambling (Emotional/psychological)
10. Felt like a failure (Emotional/ psychological)

3.5.1 Who determines whether gambling is potentially harming someone?

All gambling venues must have a policy for identifying problem gamblers and for approaching and checking in with gamblers under the legislation. Venues tend to look for intensity and frequency of play, emotional behaviour, dysfunctional behaviour and running out of money[8]. However, most anecdotal stories by gamblers on provider's websites[9] or in the media[10] suggest that despite having serious gambling problems they never had any interaction with venue staff.

The 2016 HLS stated that one half of EGM players in pubs, clubs or casinos said they had not had any interaction with staff. A further 29 percent only interacted when they changed money, 12 percent said had a general chat and 12 percent said that they were aware venue staff recognised them or knew their name. Only 0.3 percent had ever been spoken to by venue staff about their gambling.

Ladouceur, Shaffer, Blaszczynski, & Shaffer, (2017) conducted a systematic literature review looking at the empirical evidence underpinning responsible gambling strategies. They included three studies on training of venue employees intervening with problem gamblers. The authors found that this initiative demonstrates partial effectiveness.

There is little research available to help inform this training, especially around identifying what a problem gambler might look like. Delfabbro, Thomas, & Armstrong in 2016 and 2017 looked at this issue with Australian gamblers and found:

- Six indicators that may help identify problem gamblers - betting AUD$2.50+ per spin most times; leaving venue to find more money; feeling sad or depressed after gambling; change in grooming/appearance; gambling through usual lunch break; putting money back in and keeping playing. The results showed that if someone has five or more of these indicators, there is an 89 percent probability of being classified as a problem gambler.

[8] Indicators of problem gambling taken from SkyCity Problem Gambler Identification Policy available at: https://www.skycityauckland.co.nz/about-us/host-responsibility/

[9] http://www.salvationarmy.org.nz/need-assistance/addictions/societys-subtle-killers

[10] https://interactives.stuff.co.nz/2018/01/whos-in-charge-of-michael/

- They also found that it was easier to identify female problem gamblers than male. This was through distinct behaviours such as reporting emotional distress, attempting to access credit and notice a decline in grooming than female non-problem gamblers.
- Males were more likely to display aggressive behaviour towards gambling machines and others in the venue. They were also more likely to attempt to conceal their presence and attempt to access credit than male non-problem gamblers.

These studies were limited by using self-reports of behaviours, rather than observations, and the findings have not been validated against actual behaviours in venues.

Some treatment providers use other opportunities to engage those who may be experiencing the impact of gambling harm, such as poverty, violence or crime by engaging them through other mechanisms such as food banks, other health and addiction services, Police and Justice.

Summary conclusion

The current shape of service delivery in New Zealand is based around a public health model (as set out in the legislation) to address the wider harms caused by gambling, not just those for the problem gambler themselves. There is still some debate about the gambling harm, and how to measure it.

The types of harms caused by gambling include financial loss, relationship difficulties, distress, cultural harm, reduced performance and even crime. Financial loss often causes or triggers subsequent other harms to gamblers and their families.

Financial losses experienced by gamblers consist mainly of losses to other (winning) gamblers, and losses to Government and the charitable sector. These losses are in principle subject to regulatory control and can be reduced directly by Government policy intervention.

Browne et al. (2017) developed an alternate measure to the commonly used PGSI tool; the short harms gambling measure (SGHS) which has the potential to identify a much broader segment of the population who are experiencing harm as a result of gambling.

4. Gambling is widely available across the country

4.1 Introduction

This section provides maps of the location of gambling venues in four major cities: Auckland, Hamilton, Wellington and Christchurch. Maps of provincial areas of Northland, Bay of Plenty, Rotorua and Gisborne are also shown which have high density of EGMs. Location mapping is a method of showing how the gambling venues are easily accessible, and what appears to be a trend of having a higher density of gambling machines in areas with small populations, and/or areas of high deprivation.

4.2 Widespread accessibility of gambling venues across New Zealand

There are approximately 3,330 gambling venues in New Zealand; 44 percent are Lotteries outlets, 36 percent host EGMs, and 20 percent are TAB outlets. There are six casinos in New Zealand, located in Auckland, Hamilton, Christchurch, Dunedin and Queenstown (2). Casinos offer EGMs as well as gaming tables.

EGMs are widely accessible at pubs and clubs around New Zealand. As at 30 September 2017, there were 15,717 EGMs located at 1,163 venues throughout the country; an average of 14 per venue. The maximum number of EGMs allowed in any venue which was in operation prior to the Gambling Act 2003 is 18; any new venues are only allowed a maximum of nine machines, except where a relocation policy[11] has been adopted.

The New Zealand Lotteries Commission offers a range of products including Lotto, Instant Kiwi, Keno, and others. These products are sold from 1,467 outlets across the country (as at October 2017).

The New Zealand Racing Board operates TAB outlets, with venues located throughout New Zealand. There are over 600 TAB outlets, including dedicated TAB stores and agents hosted in other businesses such as clubs and pubs.

For the list of venues available, we were able to geocode[12] the addresses of 97 percent of Lotteries outlets, 83 percent of gaming machine venues, 97 percent of TAB outlets and all casinos.

The maps that follow display the location of gambling venues in four main centres, overlaid upon the New Zealand Index of Deprivation 2013 (NZDep2013). The NZDep2013 is an area-based measure of socioeconomic deprivation in New Zealand. It measures the level of

[11] Under the Gambling (Gambling Harm Reduction) Amendments Act (2013) a Council may adopt a relocation policy which will allow venues to move from areas of high deprivation to low deprivation with no loss of the number of EGMs they can operate. Without a relocation policy the maximum number of EGMs in any new venue is 9.

[12] Geocoding is a process to find the latitude and longitude (i.e. x,y coordinates) of an address.

deprivation for people in small areas, based on nine Census variables. Deprivation scores are ordered and grouped into deciles; with 1 representing the least deprived areas and 10 the most deprived. The deprivation score is often shown as quintiles, with 5 representing the most deprived areas.

For clarity, gaming machine venues and TAB outlets are shown on separate maps of the main centres. We have also included a snapshot of some provincial areas to show the availability in smaller, less urban communities.

4.2.1 Location of gambling venues

Location of gambling venues

The general picture is one of widespread availability, with large parts of the population living in relatively close proximity to gambling venues.

The maps show concentrations of gambling locations in socially deprived areas, for example EGMs in South Auckland (Figure 3) which are not seen in many wealthier suburbs. Some deprived areas, such as Eastern Porirua (Figure 7) have very few gaming machine venues.

Maps of provincial areas again show the availability of gambling in many parts of New Zealand, with a number of gambling venues in small communities with high deprivation (e.g. parts of Northland in Figure 11).

Auckland

Figure 3 Location of gaming machine venues in Auckland

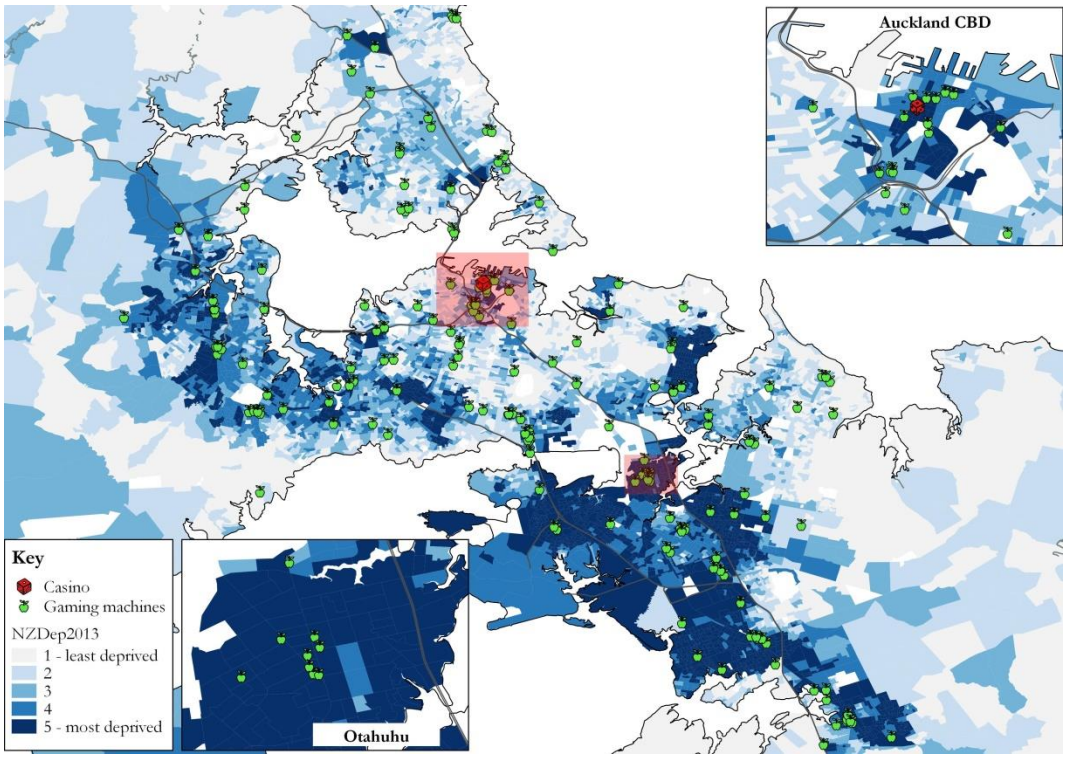
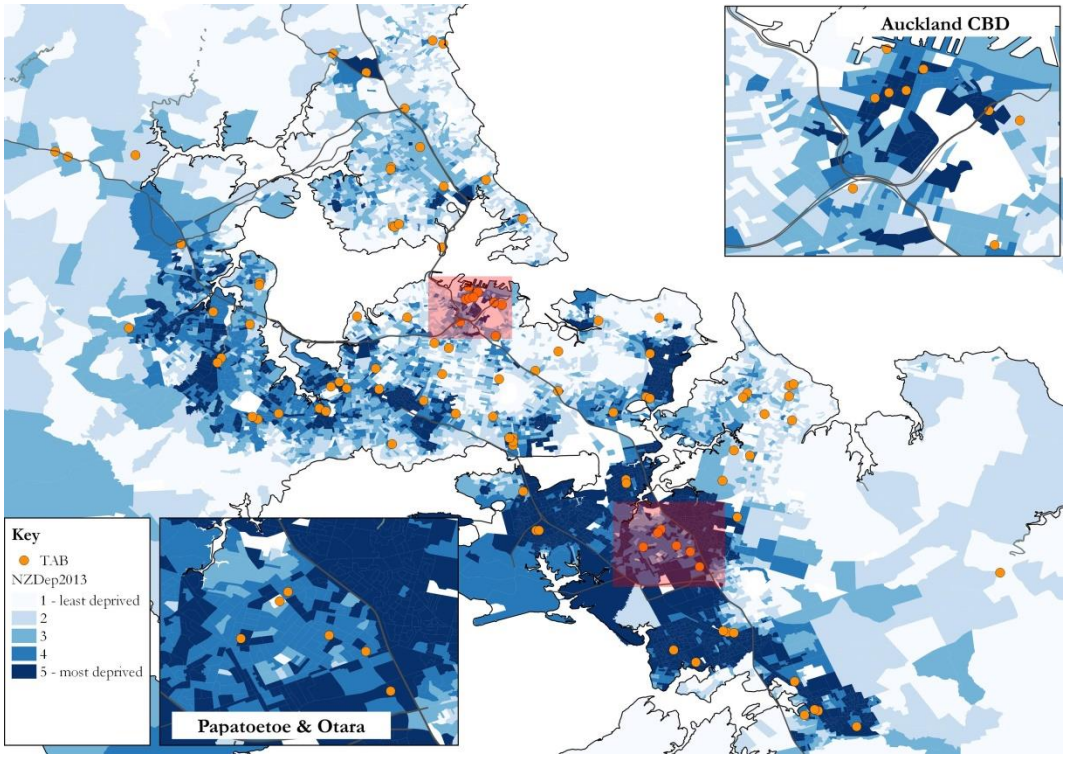


Figure 4 Location of TAB outlets in Auckland



Sources: The Department of Internal Affairs, NZ Racing Board, University of Otago

Hamilton

Figure 5 Location of gaming machine venues in Hamilton

Figure 6 Location of TAB outlets in Hamilton

Sources: The Department of Internal Affairs, NZ Racing Board, University of Otago

Wellington

Figure 7 Location of gaming machine venues in Wellington

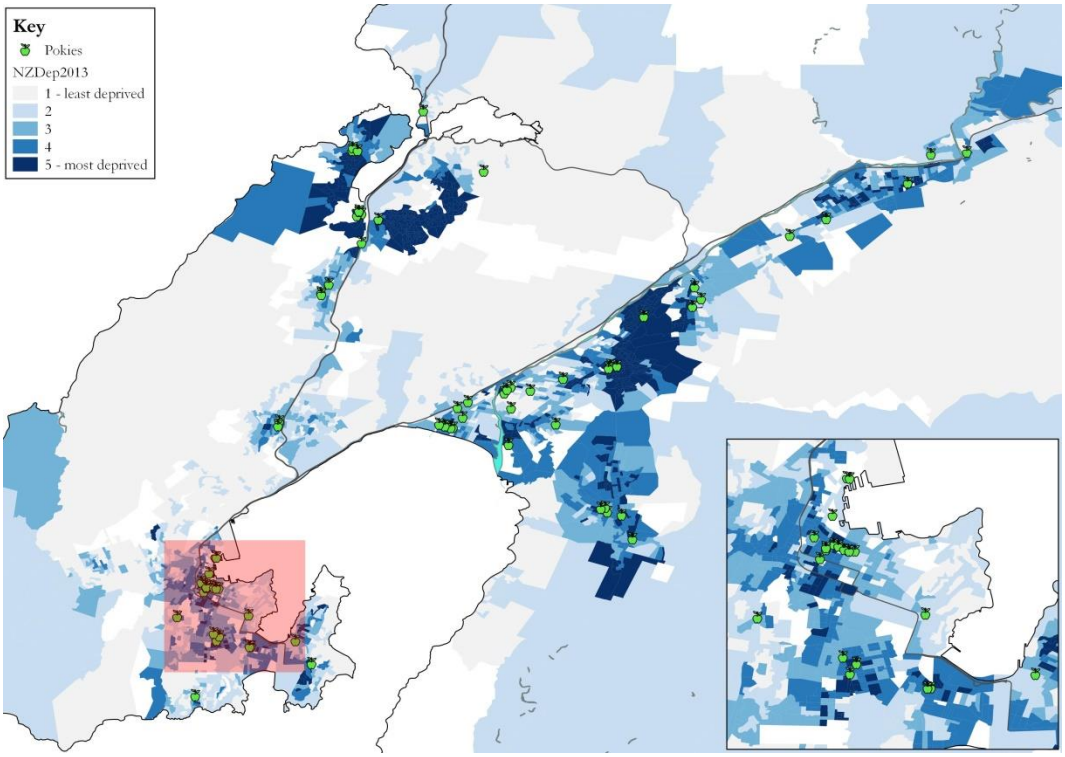
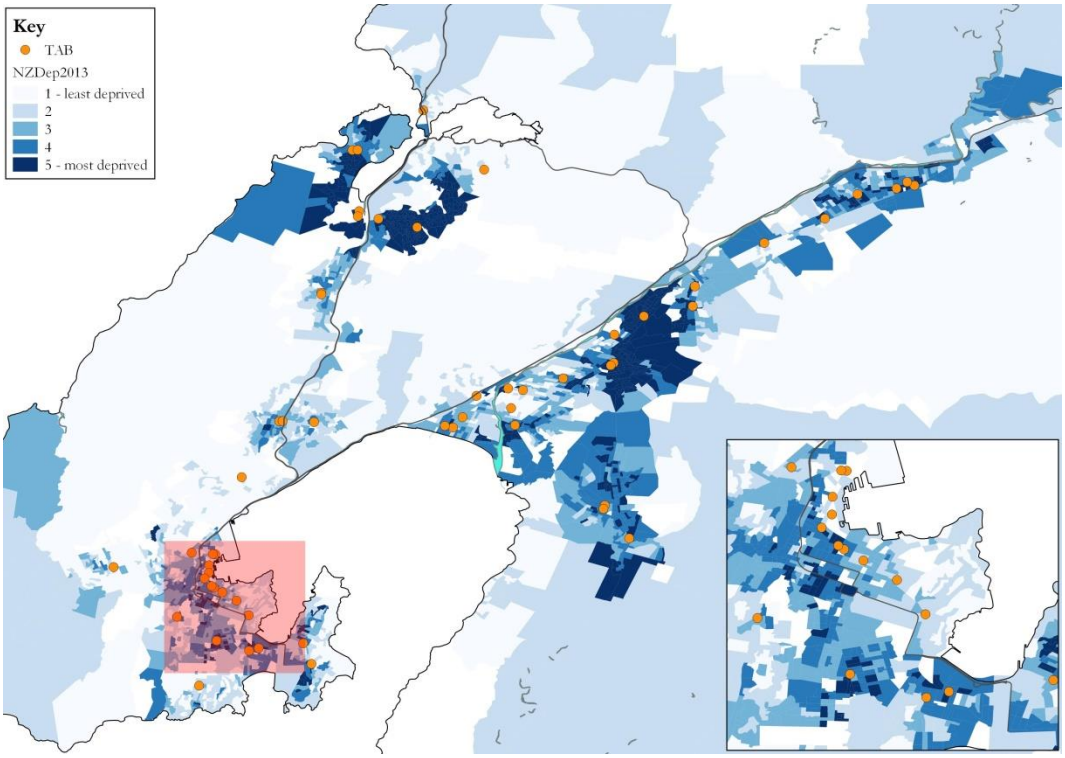


Figure 8 Location of TAB outlets in Wellington



Sources: The Department of Internal Affairs, NZ Racing Board, University of Otago

Christchurch

Figure 9 Location of gaming machine venues in Christchurch

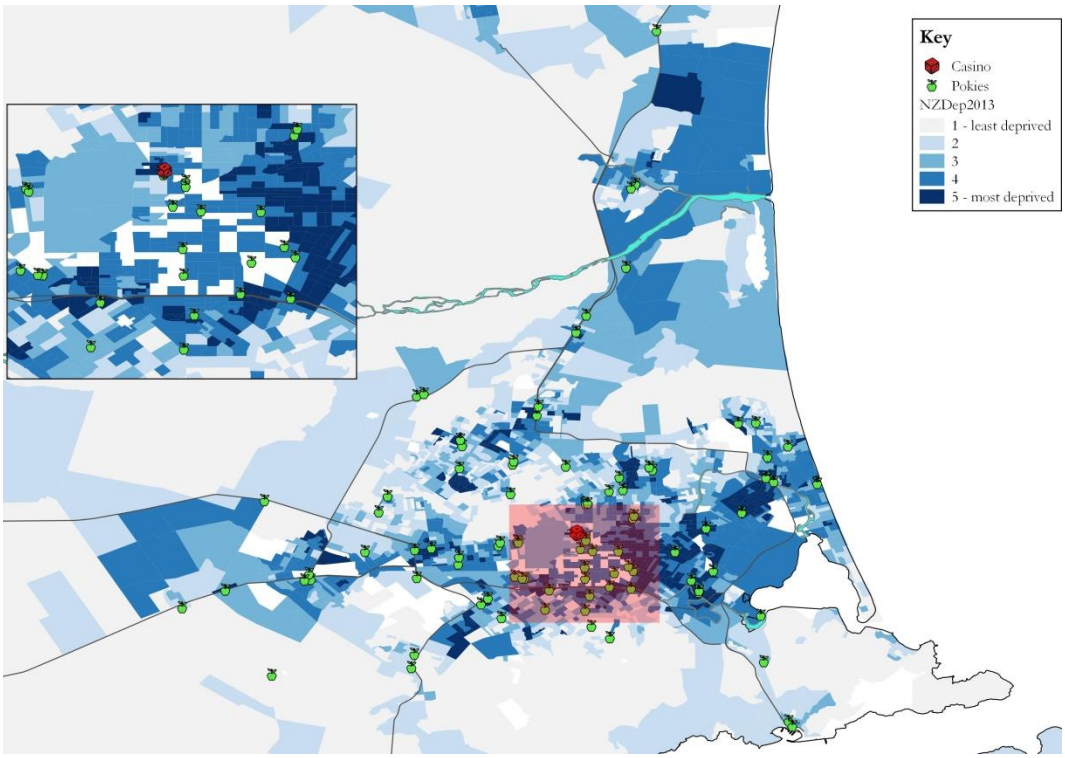
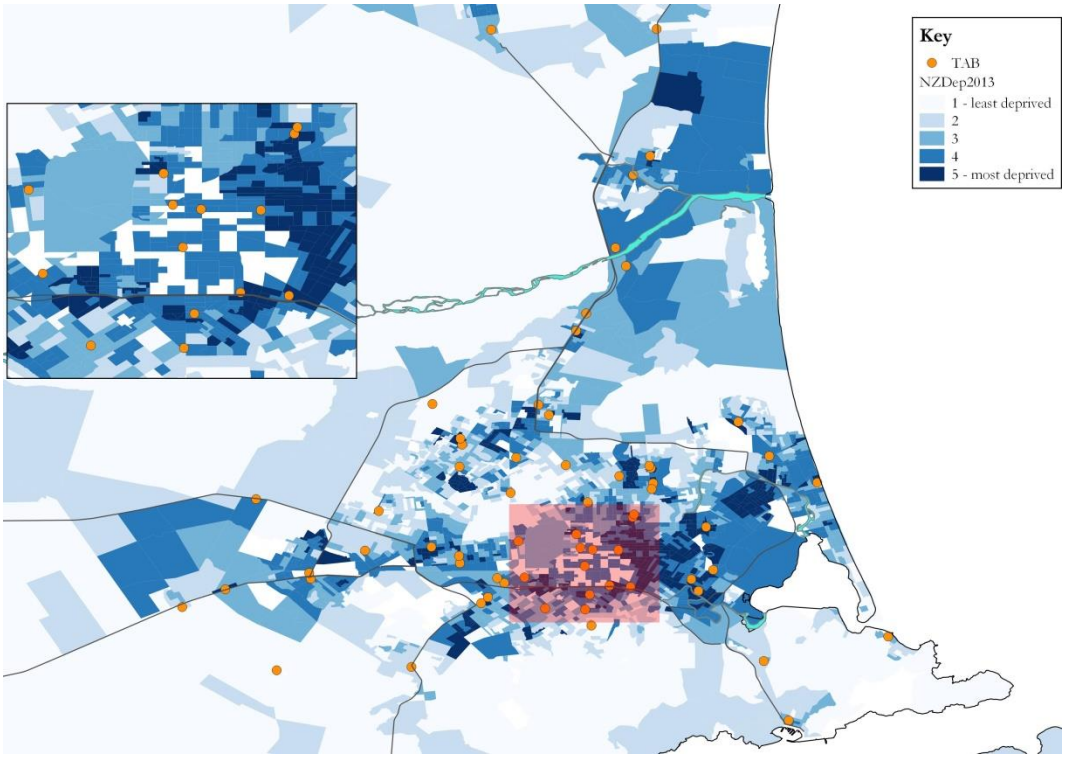


Figure 10 Location of TAB outlets in Christchurch



Sources: The Department of Internal Affairs, NZ Racing Board, University of Otago

Provincial areas

Figure 11 Location of gambling venues in Northland

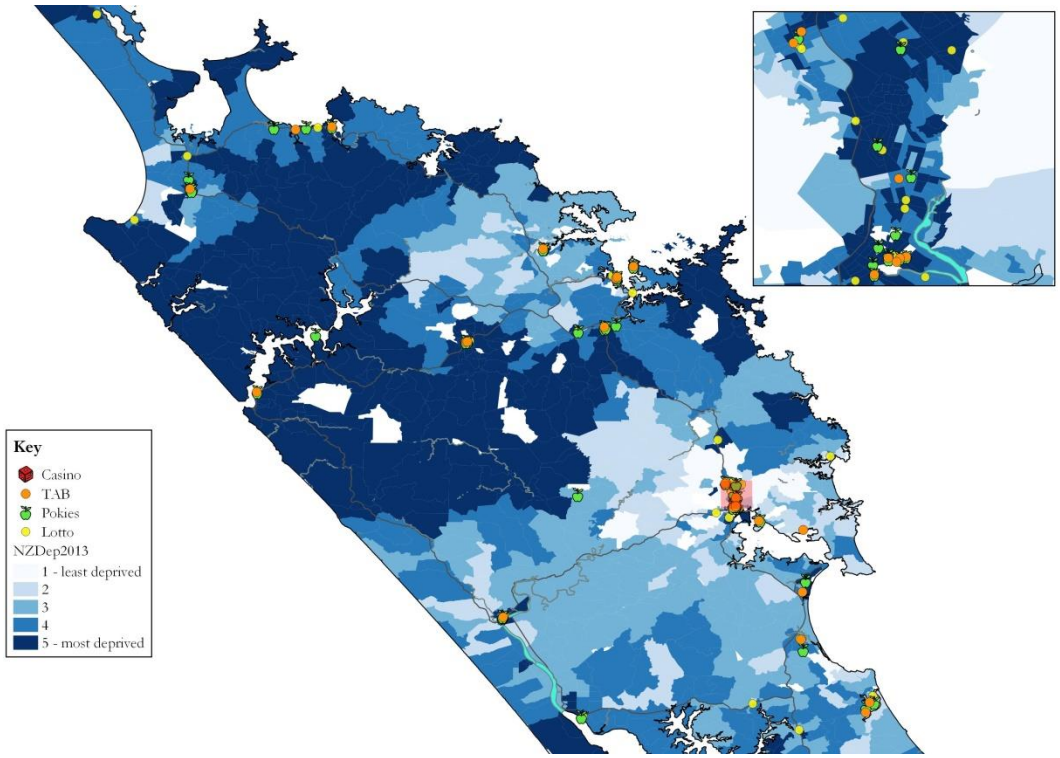
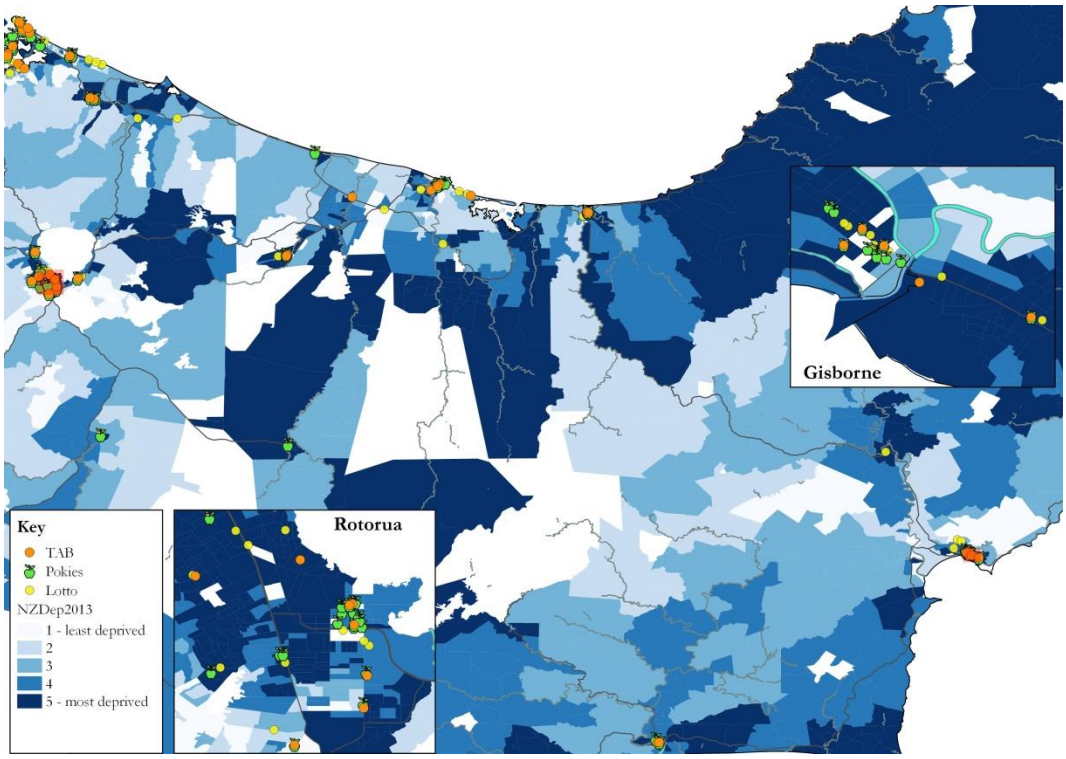


Figure 12 Location of gambling venues in Bay of Plenty, Rotorua and Gisborne



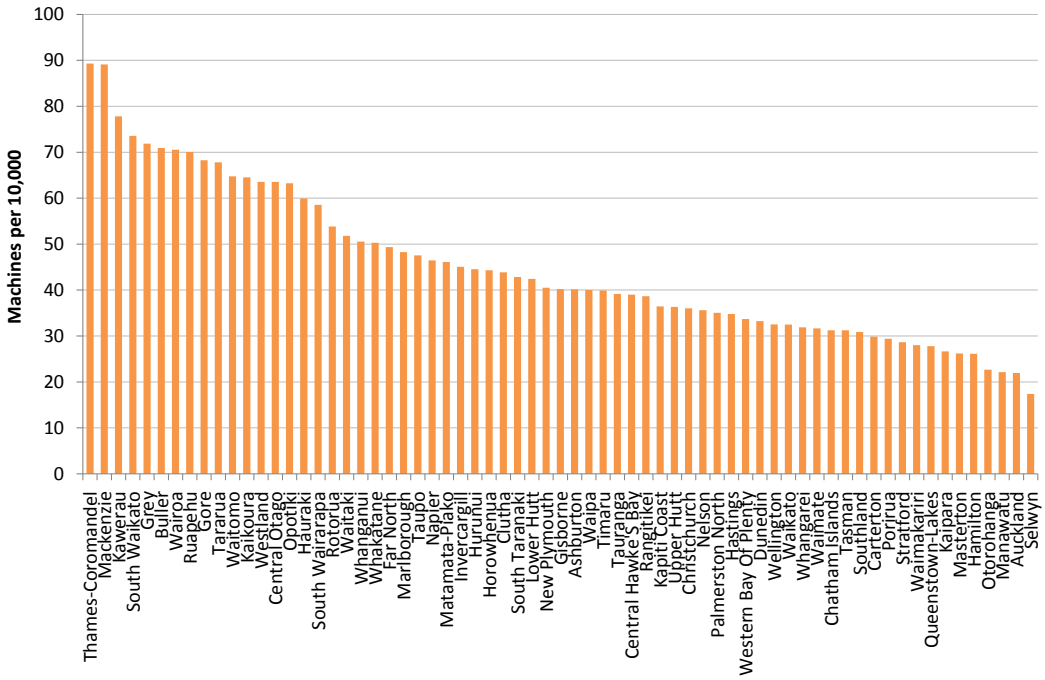
Sources: The Department of Internal Affairs, NZ Racing Board, NZ Lotteries Commission, University of Otago

4.2.2 High gaming machine density tends to be in areas with small populations

Figure 13 shows that the density of EGMs varies across territorial local authorities (TLAs – district or city council areas). The areas with the highest density are Thames-Coromandel and Mackenzie districts, followed by Kawerau and South Waikato.

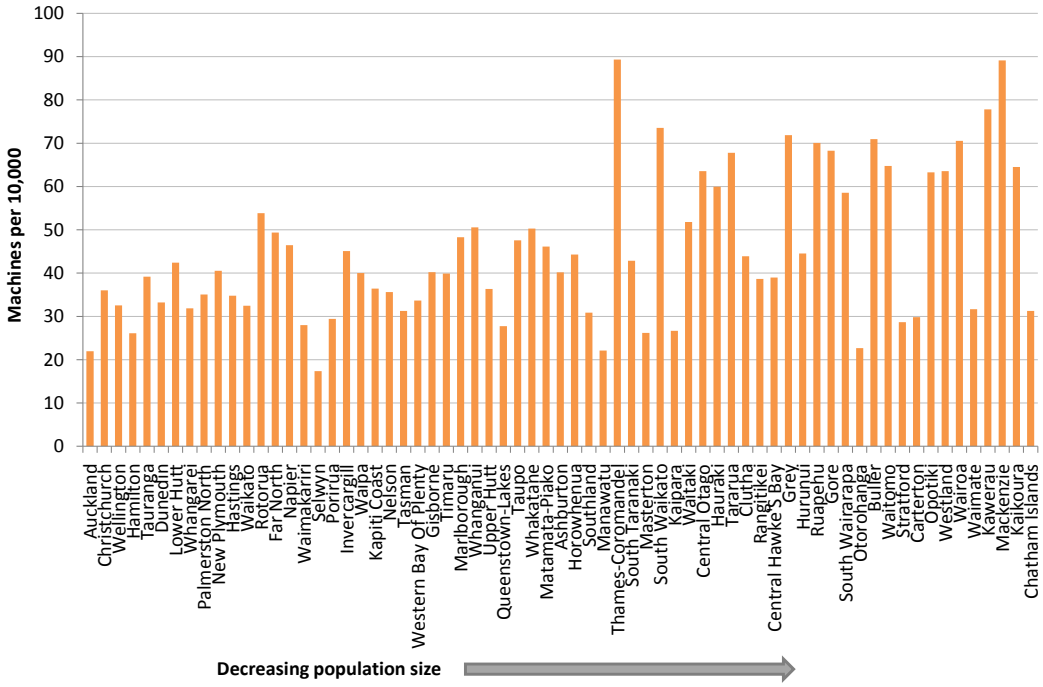
In Figure 14, the TLAs are ordered by decreasing population size. This shows that the areas with the highest gaming machine density have smaller populations (although not all small populations have high EGM density). Some of these small populations with high availability of EGMs have a large proportion living in social deprivation, for example Kawerau (89% live in quintile 5 areas), Wairoa (64%), Opotoki (66%), Waitomo (39%), and Ruapehu (44%) districts.

Figure 13 Electronic gaming machines per 10,000, 2016/17



Source: The Department of Internal Affairs

Figure 14 Electronic gaming machine density ranked by population size, 2016/17



Source: The Department of Internal Affairs

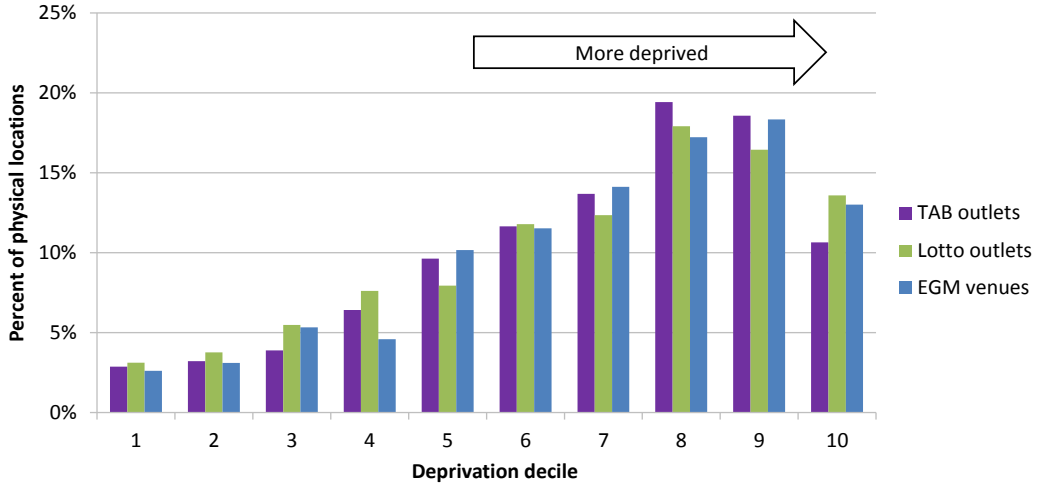
4.3 Gambling venues more concentrated in socially deprived areas

Where a NZDep2013 decile has been calculated for the meshblock[13] in which a gambling outlet is located, we can assign it to that venue and then look at the deprivation distribution of gambling locations. Figure 15 shows the distribution of different types of venues across the NZDep2013.

The chart suggests that gambling venues are more heavily concentrated in deprived areas. It should be noted that areas containing central business and retails districts tend to have higher (more deprived) NZDep2013deciles than those which do not. This means that any enterprise which tends to be located in central business or retail districts will also tend to be located in more deprived meshblocks, and this may explain some of the distribution seen below.

[13] A meshblock is the smallest geographical unit defined by Statistics New Zealand. Some meshblocks with small populations are not assigned an NZDep2013 decile.

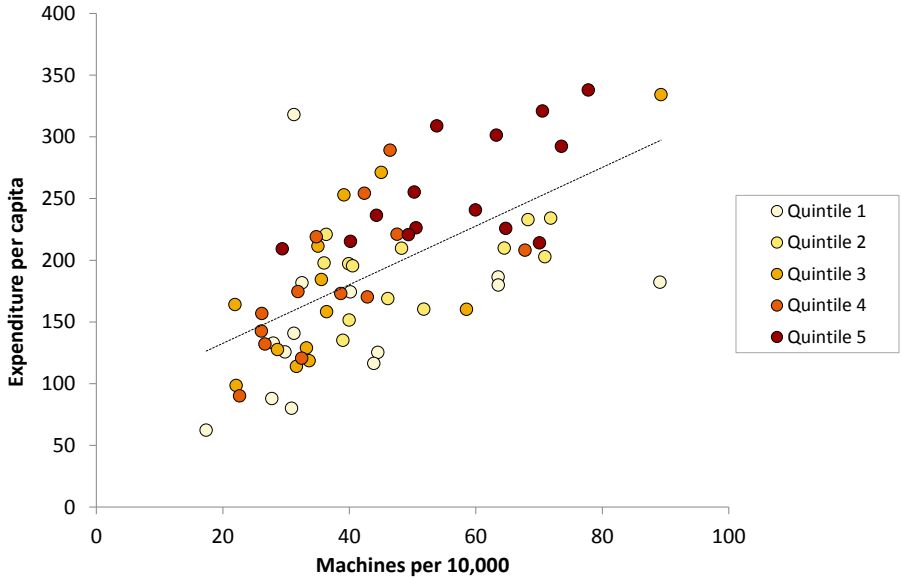
Figure 15 Distribution of gambling venues by NZDep2013



Source: The Department of Internal Affairs, NZ Racing Board, NZ Lotteries Commission

In Figure 16, EGM expenditure per capita is plotted against EGM density for each TLA in New Zealand. A simple linear regression model shows that expenditure increases as machine density increases, however the scatter of points either side of the line suggests that a more sophisticated model is required to explain the variation.

Figure 16 Machines versus expenditure for territorial authorities (grouped according to proportion living in quintile 5 areas), 2016/17

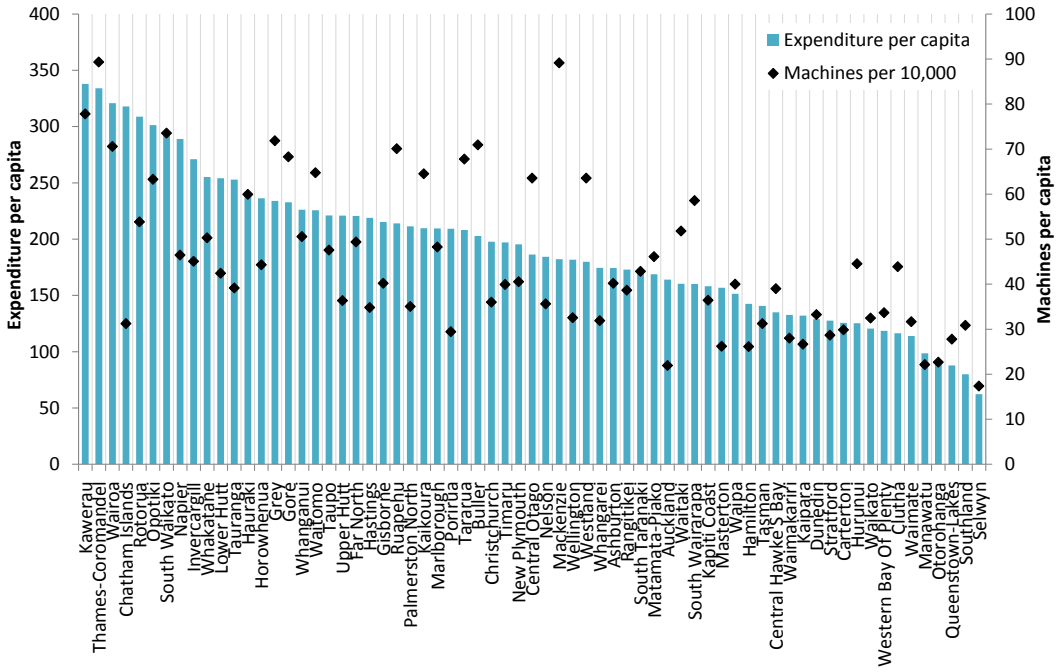


Source: The Department of Internal Affairs

TLAs are grouped into quintiles according to the proportion of its population living in an NZDep2013 decile 9 or 10 area: that is, quintile 1 is the 20 percent of TLAs with the lowest proportion of people living in deprived areas and quintile 5 is the 20 percent of TLAs with the highest proportion of people living in deprived areas. Figure 16 shows that areas with the largest deprived populations tend to have more EGMs and higher expenditure for their size.

In Figure 17 we can see the TLAs with the highest EGM expenditure per capita: Kawerau and Thames-Coromandel districts; followed by Wairoa, Chatham Islands, Rotorua, Opotoki, South Waikato and Napier City. Several TLAs with high expenditure also have relatively high EGM density. The areas with both high availability and expenditure tend to be those with larger deprived populations.

Figure 17 Electronic gaming machine expenditure and density, 2016/17



Source: The Department of Internal Affairs

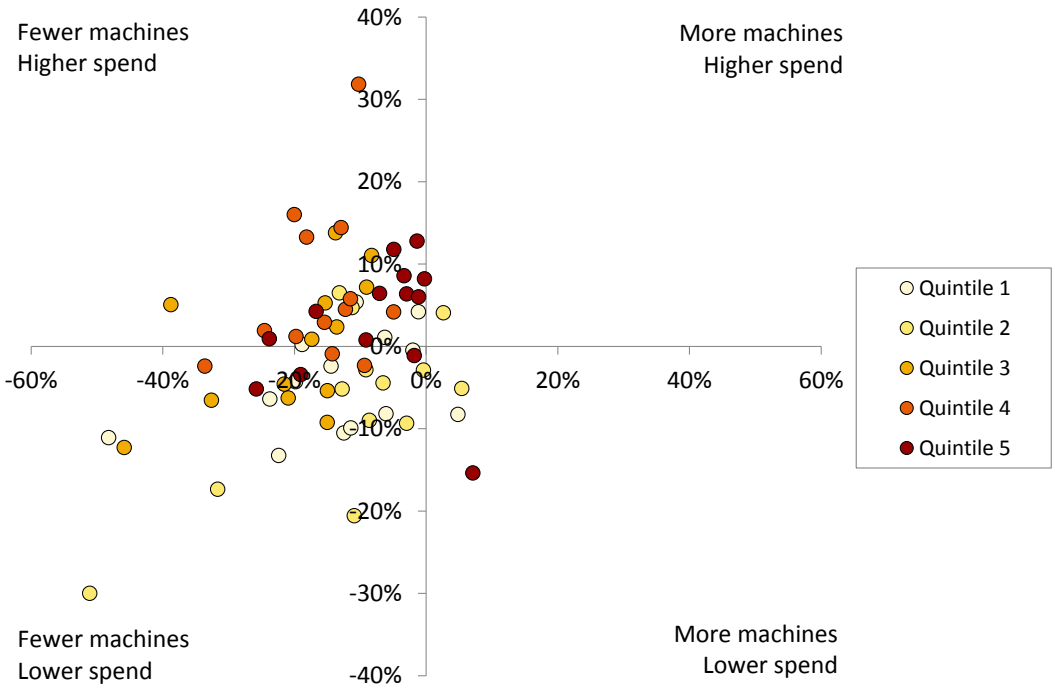
4.4 The impact of sinking lid policies is unclear

Local government is responsible for consulting with its communities when reviewing local policies in regards to gambling venue policies, such as "sinking lids" or relocation policies.[14] Reducing accessibility through local council policies was an attempt to minimise harm in line with widely accepted 'availability theory' – that is that access has led to increased participation and therefore contributed to a greater proportion of problem gamblers.

Figure 18 below shows that a reduction in EGMs in high deprivation areas does not necessarily correlate with a reduction in expenditure. However, this could be due to the minimal impact of small reductions of access against the already high availability of gaming machine and venues.

[14] "Sinking lid" policy refers to a policy which can be adopted by local governments so that when a Class 4 venue closes another is not allowed to open to replace it, thus over time reducing the overall number of venues. Local government also has the option to adopt a "relocation policy" which allows venues to move from areas of high deprivation to areas of low deprivation. These policies require public consultation.

Figure 18 Change in EGM density versus expenditure per capita for territorial local authorities (grouped according to proportion living in quintile 5 areas), 2013/14 to 2016/17



Source: The Department of Internal Affairs

Figure 18 plots the change in EGM expenditure per capita (vertical axis) against the change in EGM numbers per capita for each TLA, between 2013/14 and 2016/17. Nearly all areas are on the left hand side of the plot, showing a decrease in machines per capita for most TLAs. In some areas, the reduction in EGM density was matched by a decrease in expenditure (those located in the lower left quadrant) but for many, there was an increase in expenditure (upper left quadrant).

The TLAs with the largest reduction in EGMs were mostly those with a small number of venues, with one closing during the period. In a number of TLAs with a large number of venues, i.e. high availability, expenditure still increased despite a relatively large decrease in EGM numbers (compared to other areas). Although machine numbers have reduced, many people are still living in close proximity to gaming venues.

As before, TLAs are grouped into quintiles according to the proportion of their population living in an NZDep2013 decile 9 or 10 area. Areas with the largest deprived population are mostly in the upper left quadrant, where there has been a decrease in availability but an increase in expenditure.

4.5 Venue design, expenditure and accessibility are all linked

Research suggests that gamblers prefer venues that are solitary and minimise scrutiny (Adams and Wiles, 2017 and Rockloff et al. 2017). Venues are designed to encourage this behaviour so they are partitioned away from the main space (in pubs and clubs), there are no tables to socialise in the area, and entry pathways into the gambling annex minimise scrutiny. This is all intended to encourage uninterrupted and solitary play (Adams and Wiles, 2017).

Problem gamblers may prefer different venues to non-problem gamblers. Rockloff et al. (2017) found that problem gamblers place a higher weight on large venues and variety of available games, and a lower weight on the company they share. Problem gamblers also placed a reduced importance on the platform through which gambling is accessed (e.g. online or on-land).

Adams and Wiles (2017) suggest that more effort is put into exploring ways in which these sites could provide the locale for public health interventions (e.g. looking into regulations on venue design, sensory features of the annex, and access-ways to the annex).

4.5.1 A person choses the gambling venue rather than the machine

Thorne et al. (2016) put forward a "Hierarchy of Gambling Choices", a framework that aims to understand the key environmental and contextual features that influences where people use EGMs. First someone choses how to gamble (online or land-based), then where to gamble (pub/club/casino), and lastly the game itself (e.g. graphics, bonus features). The authors suggest this framework can be used to systematically explore the environment surrounding EGM gambling and how it affects consumer behaviour. As an example, if a particular EGM was removed from a venue, and it happened to be a gambler's favourite machine, this framework would predict that the consumer would just move to another machine, as this is the easiest and most substitutable level in the hierarchy. It is unlikely the consumer would go to another venue that had the same machine, as that would take more effort.

4.5.2 Machine design can increase expenditure per machine

Cox and Hurren (2017, grey literature) examined the relationship between expenditure and number of venues and class 4 machines in New Zealand. At the end of 2013, expenditure on class 4 EGMs started to slowly increase (before this, expenditure was declining). The authors looked at what this could be linked with through statistical analyses. They found a positive relationship between expenditure and the number of venues where gaming can happen, and between expenditure and the number of Stand Alone Progressive Prize (SAPP) machines[15]. Macroeconomic variables such as population growth and earnings, did not explain the increase. They concluded that SAPPs appear to have lifted expenditure per machine.

[15] SAPP machines are a type of EGM, where the games contribute to incrementally increasing prizes that can only be won on that machine, and are also capable of winning a linked jackpot. They started to be introduced in 2010 (Cox and Hurren, 2017)

Summary conclusion

Gambling venues are readily accessible across the country, and tend to be denser in areas with small populations and/or high deprivation. It is difficult to establish a correlation between reduction of gambling venues and expenditure. Limiting access has been a primary component of the approach to minimise harm, but there is no compelling evidence from the analysis in this report that reductions in venues created through policies such as sinking lid have had an impact. This could be in part due to the minimal reductions not sufficiently impacting on accessibility. Research shows that design of venues as well as machines can impact on expenditure. Venues are designed to encourage solitary play, with minimal scrutiny partitioned away from the main space (in pubs and clubs) and with no tables to socialise in the area.

5. High participation in gambling within high deprivation and lower income households

5.1 Introduction

The following section outlines the prevalence of gambling in New Zealand. It documents expenditure and losses of gamblers, outlines the popularity of various gambling types available, and notes how gambling is integrated in kiwi culture through its easy accessibility and advertising.

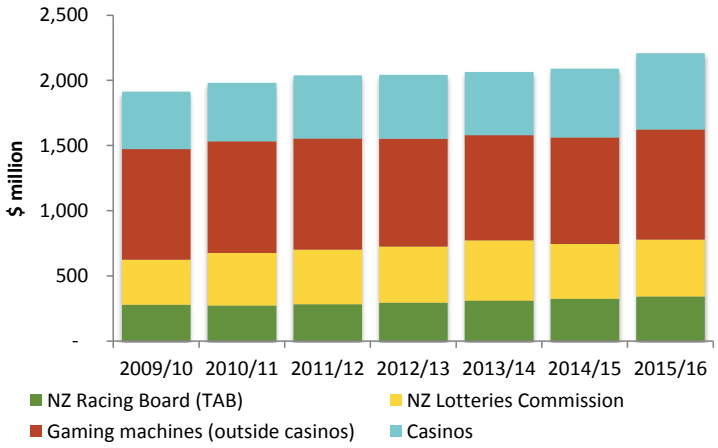
5.2 The total amount lost by gamblers in New Zealand has increased

"Expenditure" refers to the amount lost by players, or the gross profit of gambling operators. The Department of Internal Affairs (DIA) reports this information for the four main types of gambling activity – TAB racing and sports betting, NZ Lotteries products, EGMs outside casinos, and casino gambling. Expenditure statistics are compiled using information from the Electronic Monitoring System[16] and gambling operators.

Figure 19 shows that total gambling expenditure has increased over the last seven years. Gamblers in New Zealand spent $2,209 million dollars on the four main types of gambling in the 2015/16 year, 5.6 percent more than the previous year. More was spent on all forms of gambling, though the largest increase was in casino gambling (11.1%) and the lowest in EGMs (3.1%). EGMs represented the largest share of expenditure (38.2%) followed by casinos (26.5%).

[16] Section 86 of the Gambling Act 2003 requires all EGMs in pubs and clubs (Class 4) to be connected to an Electronic Monitoring System (EMS). EMS obtains accurate and timely information about gaming machine usage.

Figure 19 Total gambling expenditure



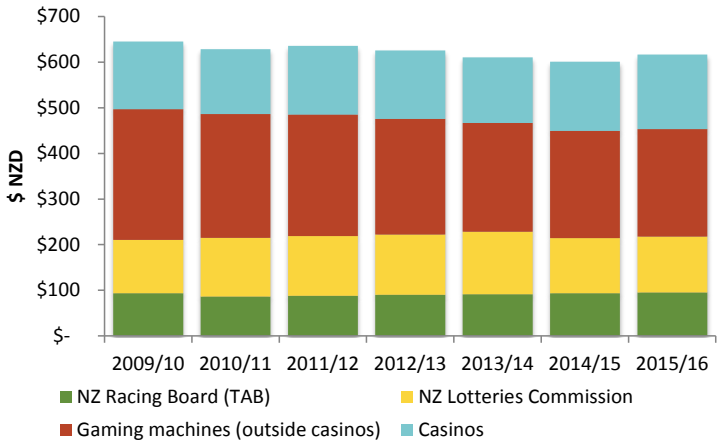
Source: The Department of Internal Affairs

According to the DIA[17], the increased casino take was driven by "*positive macro-economic conditions, record tourism and significant improvements to casino facilities*". Further, they note that the increase in TAB spend was driven by "*higher active customer numbers and additional fixed odds betting options*".

The DIA points out that "*the replacement of the "Big Wednesday" promotion with two weekly "Powerball" draws allows jackpots, the size of which drives Lotto sales, to grow more quickly and reach higher amounts more consistently. NZ Lotteries has also increased its retail presence in supermarkets, at fuel sites and through expanded digital offerings*".

Adjusting for the effects of both inflation and changes to the adult population (18 years and older), shows that gambling expenditure increased by 2.6 percent, from an average of $601 per person in 2014/15 to $616 per person in 2015/16 (Figure 20) whereas data for previous years shows that the trend was generally downward from 2009/10.

Figure 20 Total inflation adjusted expenditure per capita



Source: The Department of Internal Affairs

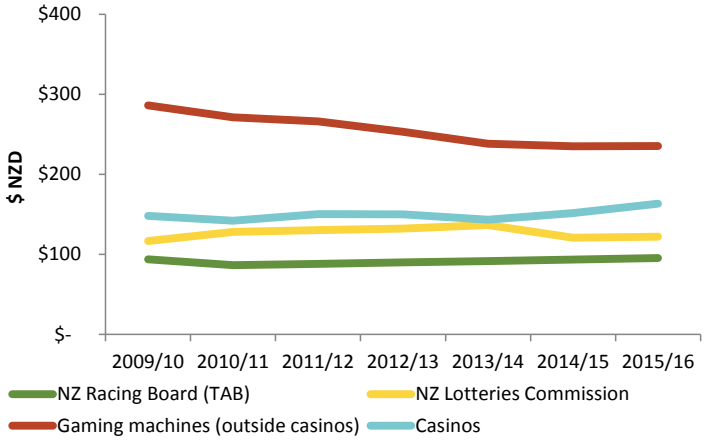
[17] www.dia.govt.nz/press.nsf/d77da9b523f12931cc256ac5000d19b6/3a06349360714c2ccc2580cf00823375!OpenDocument

1. Inflation adjustment was done using the Reserve Bank of NZ inflation calculator, General (CPI), Q2 of each year.
2. Per capital calculations are based upon the Statistics NZ medium estimate for the population 18 years and over, as at 30 June of each year.

5.3 EGM expenditure per capita has reduced over time

Inflation adjusted expenditure per capita increased across all forms of gambling except EGMs, which remained at $235 per person in 2015/16 (Figure 21). Overall, the EGM spend per person has dropped 18 percent since 2009/10. There was a substantial drop in NZ Lotteries products spend per person in 2014/15.

Figure 21 Inflation adjusted gambling expenditure per capita, by type



Source: The Department of Internal Affairs

5.4 Prevalence

There have been many attempts to establish the prevalence of gambling, and in particular problem gambling so that we might be able to determine whether the approaches to reduce or minimise harm are working. The two main research studies in New Zealand in this regard are the New Zealand Health and Lifestyles Survey ('HLS'; - conducted by the Health Promotion Agency) and the National Gambling Study (NGS - conducted by AUT). These studies have used different survey questions and response options, in particular around the number of gambling activities. These are an important indicator because there is no standardised way of measuring the number of gambling activities, and for this reason, it is important to exercise caution when comparing findings from studies.

The Health Promotion Agency undertakes the Health and Lifestyles Survey (HLS) every two years. The survey is undertaken in people's homes across the country to draw a representative sample of New Zealanders' (aged 15 years and over) health behaviours and attitudes. This includes experience, knowledge and opinions about gambling and gambling-related harm.

Gambling prevalence has fluctuated over time between these two studies; the latest results are captured in the shaded boxes below. These latest results show a positive picture of a lower proportion of problem gamblers, and a declining trend of Māori and Pacific moderate-risk and problem gamblers.

Health Promotion Agency (2017). Gambling report: Results from the 2016 Health and Lifestyles Survey. Wellington: Health Promotion Agency Research and Evaluation Unit [still in draft].

Around 5% (~186,000 New Zealand adults) of respondents reported experiencing at least some level of individual gambling harm as measured by the PGSI[18]:

- 3.3% (around 125,000 people) were "low-risk gambling",
- 1.5% (around 55,000 people) for "moderate-risk gambling",
- 0.1% (around 6,000 people) for "problem gambling".

The National Gambling Study (NGS) is a Ministry of Health funded longitudinal study into gambling, health, lifestyles, and attitudes about gambling which has been conducted in three waves in 2013, 2014 and 2015. It was the first New Zealand population representative study which started in 2012 with a randomly selected national sample of 6,251 people aged 18 years and older living in private households, and interviewed face-to-face. Survey questionnaires include questions on leisure activities and gambling participation, past gambling and recent gambling behaviour change, problem gambling, life events, attitudes towards gambling, mental health, substance use/misuse, health conditions, social connectedness, level of deprivation and demographics.

The 2014 NGS highlighted the disproportional burden of harm on Māori and Pacific, as despite higher proportions of European /Other participating in gambling, a greater proportion of 'problem gamblers' were Māori and Pacific. The NGS authors urge caution when applying the results to specific cohorts or populations and believe they are more robust when grouped as moderate-high risk and problem gamblers, especially when there may be significant movement between the two states over time.

Auckland University of Technology, Gambling and Addictions Research Centre (2016) New Zealand National Gambling Study: Wave 3 (2014)

	Moderate-high risk/ problem gamblers	Low-risk gamblers
Māori	6.3%	9.5%
Pacific	7.6%	10.2%

The results of the 2014 NGS show ethnic differences in that problem gambling and gambling harm disproportionately affect Māori and Pacific in particular. Note the combination of moderate-high risk and problem gamblers. This is to reflect the nature of the gamblers that may transition between those two states and is not a fixed cohort.

Asian	**1.4%**	**5.2%**
European	**0.8%**	**4.0%**

5.5 Advertising of gambling increases its social acceptability

While advertising of overseas gambling sites is illegal in New Zealand, the permitted forms of gambling are able to advertise their physical and online products. All gambling advertising must comply with the Code for Advertising Gaming and Gambling[19]. The Code is based on three principles:

- that the adverts are within the law;
- that they should be socially responsible; and
- they should not mislead or deceive as to the likelihood of winning or exploit lack of knowledge, superstitions or play on fears.[20]

Some of the feedback received through interviews and the workforce survey indicates that many feel that these principles are being 'stretched' by organisations such as Lotto NZ and the TAB. Advertising can create acceptability about products or activities by normalising them which can pose a risk when those products could be potentially harmful.

Some advocate for a 'plain packaging' approach to gambling advertising. This approach has been proven to be an effective intervention in tobacco control (Hughes, Arora, & Grills, 2016; Hoek, Edwards, & Daube, 2015). However, unlike tobacco, gambling is not harmful for all people and some can conduct gambling safely.

Also some activities such as Lotto and sports betting are quite ingrained in the culture, and so could still be 'promoted' through the news and media indirectly, regardless of advertising constraints.

5.5.1 Lotto advertising

The respondents to the workforce survey have strongly cited Lotto advertising as inappropriate. Examples of recent campaigns by Lotto NZ include using children in advertising linked with the possibility of achieving dreams (such as winning Lotto and sailing on a pirate ship to rescue his father from working in a fishing boat), and providing for future generations (by burying Lotto winnings in gold bars). Some respondents to the problem gambling workforce survey advocate banning of advertising:

> *"Make gambling advertising like smoking don't glamorize[sic] it or promote it as an achievable dream. Plain packaging!"*

[19] Advertising Standards Authority

[20] http://www.asa.co.nz/codes/codes/code-for-advertising-gaming-and-gambling/

"Change legislation and how gambling is promoted in the media."

The availability of Lotto products in most dairies, as well as in supermarkets and petrol stations, means its brand and presence is a familiar part of everyday culture. Also, even without formal advertising, the media feature stories on Lotto wins, and sales of Lotto tickets increase with rollover jackpots.[21] In the 2016 HLS nearly half of the respondents who had bought New Zealand Lotteries products bought more as a result of seeing Lotto advertising or promotion for a big jackpot or prize draw.

5.5.2 Linkage of sports and gambling

There is also the intentional targeting of specific demographics at emotive times, such as the tapping into patriotism during sporting events, and linking gambling with supporting a team or country.

Deans, Thomas, Derevensky, & Daube, (2017) undertook a study of young males in Australia and how marketing affected their gambling behaviour. The impact of targeted marketing that appeared to be reducing risk and using inducements of "free bets" led participants to opening multiple online betting accounts, betting more than they normally would and on activities they wouldn't normally bet on. New Zealand has much stricter legislation for gambling advertising than Australia, and advertising of overseas gambling is illegal in New Zealand, however these types of sites and accounts are readily accessible online.

An Amendment[22] to the Racing Bill is being read in Parliament to provide for "a regulatory regime under which offshore betting operators must pay charges in New Zealand in respect of their betting operations involving this country". These charges are to recognise that the offshore betting operators are making profit from New Zealand racing and sports without contributing to the gambling levy or paying any tax. This is potentially to ensure that New Zealand also stays on par with Australia who have recently made similar changes to their gambling laws [23] that has impacted on the ability for overseas people (including New Zealand residents) to bet through New Zealand TAB.

5.5.3 Other gambling advertising

EGM advertising (Class 4 gambling) is prohibited in New Zealand. Instead its advertising is in its presence and availability within communities and venues. There is no restriction on advertising of casinos, which tend to focus on their position as a place of entertainment.

5.6 So who are the winners and losers?

The gambling sector in New Zealand redistributes substantial amounts of money amongst gamblers themselves, as well as from gamblers to various parts of the community, including to Government. Gamblers do not just fund the prize pool which gets distributed to the winning gamblers. The gambling legislation also compels them to pay specific gambling

[21] https://assets.mylotto.co.nz/assets/uploads/bfe5003e-15b9-11e7-be65-e4fadf130fa6.pdf

[22] http://www.legislation.govt.nz/bill/government/2017/0288/latest/DLM7380429.html

[23] http://www.nzherald.co.nz/sport/news/article.cfm?c_id=4&objectid=11922017

levies (e.g. 20% in the case of EGMs) which flow directly into government coffers, and provide substantial funding to the charitable sector and the racing industry.

The charitable sector in turn uses funds received from lotteries, EGMs and related sources to support a wide range of community purposes, including statutory bodies such as Creative New Zealand and the New Zealand Film Commission, sports clubs, community organisations, and numerous specific projects. Some, but by no means all, of the benefits of these grants may flow indirectly back to gamblers; the remainder is redistributed to the wider community. In total, an estimated $654 million have been redistributed in 2015/16 from gamblers to a variety of community purposes.

Thus, there is a reasonably straightforward pattern of redistribution, of winners and losers:

- Government is a winner from increased tax revenue (both gambling levies as well as GST);
- The charitable sector and its broad range of community beneficiaries are clear winners;
- The NZ racing industry (NZ Thoroughbred Racing, NZ Harness Racing, and NZ Greyhound Racing) is a winner as recipient of the TAB net profits;
- Gamblers lose out to the extent that are compelled to pay for various government and community purposes as well as for their gambling entertainment.

While there is little doubt about the community benefits associated with funding of the charitable sector, the policy rationale for compelling gamblers alone to make a special and very substantial contribution to funding these community benefits is rather unclear.

There is no reason to assume that gamblers have a particularly high ability to pay (a principled policy rationale for progressive income taxes) and thus might be better placed to support charitable purposes than the rest of the community. In fact, the opposite seems to be the case: gambling tends to be more prevalent in lower income households and, as noted in section 4.3, the concentration of gambling venues tends to be higher in areas of high deprivation. Therefore gambling taxation and redistribution to community purposes tends to be regressive, i.e., placing a higher burden on the less-well-off.

The taxation of gambling has of course a very long history in many parts of the world. However, it seems to be based on more traditional moral or religious objections to gambling, and an opportunistic approach to taxation by taking advantage of a convenient target activity/population, rather than being based on principled policy reasoning and development. The former Minister of Internal Affairs Peter Dunne was recently reported[24] as saying that;

> *"Instead of hastening their demise, pokie machines should be milked while they're still here because their future is, in fact, in jeopardy";* and further
>
> *"You won't hear it spoken, but there is a feeling we should in fact make hay while the sun shines."*

Many organisations have policies that they do not accept funding which are the proceeds of gambling. Hamilton Council was in the press with its stance recently[25], however on further

[24] https://interactives.stuff.co.nz/2018/01/whos-in-charge-of-michael/

[25] https://www.stuff.co.nz/national/95581561/goodbye-gambling-dollar-hamilton-city-council-rules-it-out-for-funding-projects

investigation there are a number of councils who follow a similar view, although it is not always a formal policy. Auckland Council for example doesn't use gambling funds nor does Christchurch City Council. Christchurch lifted a moratorium on applying for gaming funds in 2004, however it is not Council practice to do so. Equally many community organisations take an ethical stance such as Wellington's Downtown Community Mission[26]in receiving gaming funds that have come from the very communities they are trying to support.

Summary conclusion

There is high participation of gambling in New Zealand which in part could be due to high availability, and supported by a culture of acceptability of gambling e.g. Lotto.

The total amount lost by gamblers has increased year on year over the last six years. Even when the total gambling expenditure is adjusted for inflation, 2015/16 still saw an increase in expenditure, following a general decreasing trend over the previous four years. The DIA explain this is in part due to a number of new offerings across the sector. The largest growth was in casinos, and the lowest growth in EGMs.

EGMs are cited as the primary mode of gambling for treatment service users, with Lotto products next. Lotto is one of the most common forms of gambling, yet it is not often considered as such, and is promoted through every media channel.

Advertising can create acceptability about products or activities by normalising them which can pose a risk when those products could be potentially harmful. However gambling unlike tobacco is not harmful for all people, and some can conduct gambling safely which may not make it a candidate for 'plain packaging'. However some activities such as Lotto and sports betting are quite ingrained in the culture and so could still be 'promoted' through the media indirectly.

While there is little doubt about the community benefits associated with funding of the charitable sector from gambling, the policy rationale for compelling gamblers alone to make a special and very substantial contribution to funding community benefits is rather unclear.

There is no reason to assume that gamblers have a particularly high ability to pay (a principled policy rationale for progressive income taxes) and thus might be better placed to support charitable purposes than the rest of the community. In fact, the opposite seems to be the case: gambling tends to be more prevalent in lower income households and, the concentration of gambling venues tends to be higher in areas of high deprivation: and so gambling taxation and redistribution to community purposes tends to be regressive, i.e., placing a higher burden on the less-well-off.

Some organisations take an ethnical stance to not receive funds from gambling sources.

[26] https://interactives.stuff.co.nz/2018/01/whos-in-charge-of-michael/

6. Gambler characteristics

6.1 Introduction

This section of the report looks to identify the characteristics of a 'typical gambler' or identify risk factors that may predispose someone to be a 'problem gambler'. It also considers what future trends there may in terms of youth and technology that may impact on what the gambler of the future might look like.

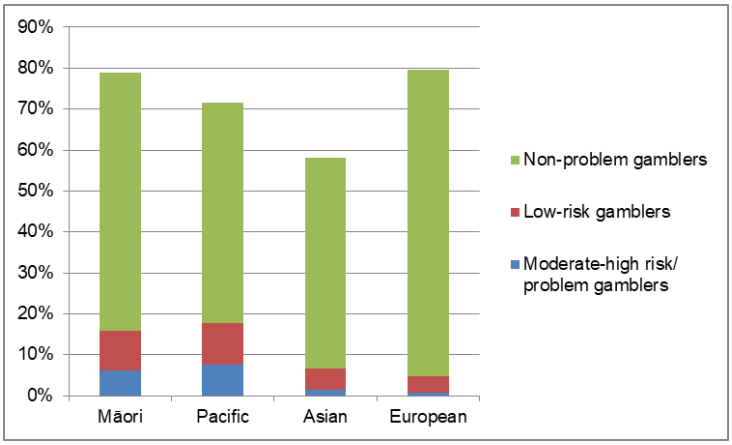
6.2 Inequities persist

The latest report utilising the 2016 HLS data stated that:

> *"Gambling with any level of risk was predicted by being Māori, Pacific or Asian, and being a current smoker." (P.17, HPA, 2017)*

The 2014 NGS highlighted the disproportional burden of harm on Māori and Pacific. Despite higher proportions of European /Other participating in gambling, a greater proportion of 'problem gamblers' were Māori and Pacific. Below is a chart which highlights the disparity, as outlined previously in section 5.4:

Figure 22 2014 NGS rates of gambling risks in ethnic populations



6.3 Problem gambling strongly linked to mental health state and disorders

Problem gambling has been consistently associated with a range of co-existing psychiatric conditions e.g. alcohol and other substance abuse (Abbott, Bellringer, Garrett, & Mundy_McPherson, 2016) mood and anxiety disorders (Dowling et al., 2015), and personality disorders (e.g. Borderline Personality Disorder) (Brown et al. 2016).

6.3.1 Many problem gamblers also use tobacco, alcohol and other drugs

Both the 2014 and 2016 HLS findings identify that a risk of gambling problems is strongly associated with smoking status. The 2016 HLS found that those who currently smoke or used to smoke were more likely to be gamblers than those who had never smoked. It also found that those who drink alcohol were more likely to report participating in gambling activities compared to non-drinkers, and those who drink at risk levels [27] were even more likely.

Dowling et al. (2015) conducted a systematic search for peer-reviewed studies that provided prevalence estimates of psychiatric disorders in individuals seeking psychological or pharmacological treatment for problem gambling. Results from 36 studies were included and the authors found that:

- 56.4% had nicotine dependence
- 18.2% alcohol abuse
- 15.2% alcohol dependence
- 11.5% cannabis use disorder[28]

6.3.2 People with psychosis are four times more likely to have a gambling problem than the general population.

There are a number of studies that have considered the prevalence of psychiatric co-morbidity and personality disorders in treatment-seeking problem gamblers.

In the same study as cited above, Dowling et al. (2015) found that nearly three quarters had either a current or past psychiatric co-morbidity. The main current psychiatric disorders found were mood disorders (23.1%), alcohol use disorders (21.2%) and anxiety disorders (17.6%)[28]. The authors suggest problem gamblers with co-morbidities may be seeking treatment at mental health or addiction services to manage their co-morbidities rather than at specialist gambling agencies for their gambling problems. The authors suggest this finding shows that there may therefore be a need for other mental health or addiction services to routinely screen for problem gambling and have appropriate resources to assess and manage the gambling behaviour of such clients.

Brown, Oldenhof, Allen, & Dowling (2016) looked at the prevalence of personality disorders in problem gamblers in 168 Australian patients seeking treatment from a specialist outpatient gambling service. The prevalence of personality disorders was 43.3 percent, with the most common being Borderline Personality Disorder. This finding suggests that problem gamblers with a comorbid personality disorder are likely to display higher levels of associated psychological symptoms, and therefore present with more complicated clinical needs.

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[27] The 2016 HLS does not define what an 'at risk' drinking level is but an assumption that is more than the recommended low risk levels, see https://www.alcohol.org.nz/help-advice/advice-on-alcohol/low-risk-alcohol-drinking-advice for more details

[28] Although these estimates were robust to the inclusion of studies with non-representative sampling biases, they should be interpreted with caution as they were highly variable across studies.

Another study considered the same premise in the reverse population. Haydock, Cowlishaw, Harvey, and Castle (2015) took a representative sample of people with psychotic disorders to provide estimates of the prevalence and clinical correlates of problem gambling. They found that people with psychosis are four times more likely to have a gambling problem than the general population.

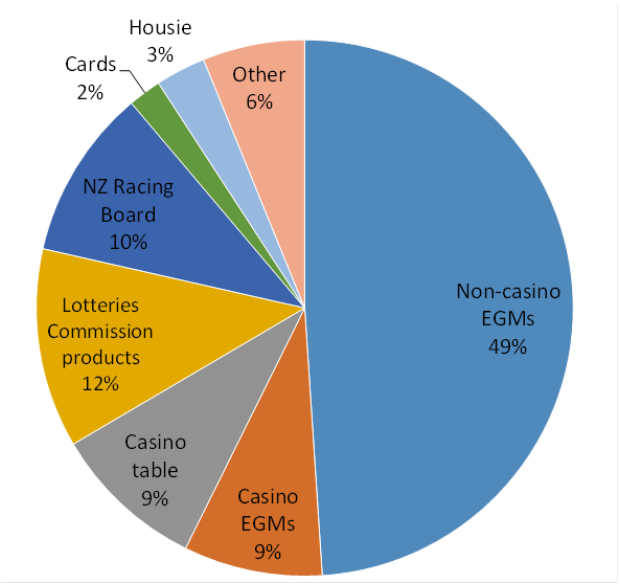
All of these findings would seem to substantiate the need to screen for gamblers in other mental health and addictions services, as well as screening problem gamblers in treatment for other mental health and addiction issues.

6.4 EGMs are the problem gambler's mode of choice

6.4.1 EGMs are a primary gambling mode for over half of people receiving interventions

Of people receiving gambling intervention services in 2015/16, almost half identified EGMs outside of casinos as a primary gambling mode and a further 9 percent identified casino EGMs as their primary mode (Figure 23). The 2016 HLS found that almost half of respondents (49%) who played EGMs in a pub or club at least monthly experienced at least some level of gambling harm.

Figure 23 Primary gambling modes for service users, 2015/16



Source: Ministry of Health.

Note: if a client records more than one primary gambling mode, it is split between the modes recorded.

6.4.2 Lotteries Commission products

Lotteries Commission products were the second largest type of gambling cited by those receiving interventions[29]. According to the 2016 HLS, just over half of adults had purchased a lottery ticket at least once in the past year. Instant Kiwi or other scratch tickets accounted for 29 percent of past year gambling. Online Lotto sales now account for 12 percent of its business. Instant kiwi scratch cards accounted for nearly 20 percent of sales[30] and accounted for $153 million in 2016/17[31]. In October 2017 NZ Lotto launched an 'instant play' phone app which is an online version of the instant kiwi scratch cards. This introduces a more continuous form of gambling into the Lotteries online products. Although spend on the app is limited to $50 per week this could have an impact on this sector of gambling in the future.

6.4.3 Casino table games

Casino table games are recorded as a separate mode to non-casino EGMs. and they are cited equally to be the primary mode of gambling for 9 percent of those in treatment.

6.5 Gamblers of the future?

6.5.1 Youth gamblers (under 18 years)

It is illegal for those aged under 18 to gamble, apart from purchasing lottery tickets, and people must be 20 years old to enter a casino. Despite this, there is evidence that youth still engage in gambling activities.

Two New Zealand studies looked at the prevalence of gambling in youth (Rossen, et al., 2016; Rossen, Lucassen, & Fleming, 2016). Males, non-European, and those more deprived were at higher risk of gambling problems. Those with co-existing mental health issues (e.g. depression and suicide attempts), other addictive/risky behaviour (e.g. use of alcohol and weekly cigarette smoking) and being in a sexual minority may also be at a heightened risk of problem gambling. Both of the studies were on youth in education. Youth who are not in mainstream education were not included, and the authors note that there is evidence they may not be as healthy as their peers.

Of students who were gambling at unhealthy levels, more than half demonstrated self-awareness (e.g. they were worried or tried to cut down). A lack of self-awareness is a barrier to seeking help, so this finding indicates that there is an opportunity to help youth address their gambling through suitable interventions. The authors emphasise the need for clinicians to consider gambling issues alongside other health issues.

Gambling to 'feel better about myself' and to 'forget about things' provided the most precise discriminants of unhealthy gambling. Authors suggest it may be useful to incorporate these 'red flags' in health promotion and treatment initiatives. Students with 'more unhealthy'

[29] If you consider those gamblers who participate in non-casino and casino EGMs as one group

[30] https://assets.mylotto.co.nz/assets/uploads/bfe5003e-15b9-11e7-be65-e4fadf130fa6.pdf

[31] NZ Lotto Annual Report downloaded from https://assets.mylotto.co.nz/assets/uploads/8d730532-b83f-11e7-b264-43356d8c19d6.pdf on 15/02/2018

gambling behaviour had significantly higher depression scores and significantly lower wellbeing scores than students who were gambling at 'less unhealthy' levels.

6.5.2 The link between electronic gaming and gambling is not proven

Gaming addiction has been recently defined by the World Health Organization as a mental health disorder[32] with many similar criteria to that of gambling disorder. This decision is not unanimously supported as many cite a lack of rigorous scientific evidence or clear definitions impeding accurate diagnosis[33]. There are also some theories that the behaviour is actually a symptom of an underlying cause such as that of depression or anxiety (Kardefelt-Winther, July 2017).

Some argue that electronic gaming may serve as a pathway to the increased likelihood of developing problematic gambling behaviours (McBride & Derevensky, 2017). Electronic gaming and electronic gambling can have many structural similarities, for example: game-based gambling practices such as loot boxes, social network casinos[34], free-to-play game mechanics[35], and gambling using virtual goods[36].

Richard, Blaszczynski, & Nower (2014) in their 'handbook of disordered gambling' argues that if gambling becomes increasingly immersed in video games, it may become harder for players to discriminate between situations where the application of skill is, or is not, possible. Involvement in video gaming might lead people to be more primed to the expectation that the probability of success improves via sustained practice. The authors call for more studies looking at the effect of encountering gambling in different contexts, and how an involvement in skilled activities, such as video games, may influence subsequent gambling behaviour.

However, a recent study by Macey & Hamari, (2018)[37] found that games do not, in themselves, act as developmental pathways to gambling. Video game consumption had only small, positive associations with video game-related gambling and problem gambling. However, the consumption of esports (competitive video gaming) was found to be a more significant predictor of increased participation in gambling.

Video game addiction was actually found to be negatively associated (a small, but significant association) with offline gambling, online gambling, and problem gambling. Those who score more highly on measures of game addiction are unlikely to migrate to gambling behaviours, despite the apparent structural similarities. This leads the authors to question the claim that problem gaming and problem gambling are fundamentally connected. The authors argue that

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[32] http://www.who.int/features/qa/gaming-disorder/en/

[33] https://theconversation.com/gaming-addiction-as-a-mental-disorder-its-premature-to-pathologise-players-89892

[34] Where users play casino-like games e.g. EGMs, but do not pay money to do so

[35] Gambling websites offering free plays on their games

[36] Virtual items used in games e.g. weapons. A type of virtual good are "skins" which are a way to customise a player's virtual goods e.g. by changing the appearance of a player's weapon.

[37] 613 respondents to an international online survey, only 6.2% of participants were female, 58.1% aged 25 and under

video games may simply be a vehicle, like many other activities, employed to fulfil particular needs derived from the activity of gambling.

There are limited studies looking at player migration from non-financial to financial types of gambling e.g. shifting from using social casino games to online gambling. Kim, Wohl, Salmon, Gupta, & Derevensky (2015) surveyed 409 social casino gamers who had never gambled online at two time-points, six months apart. About one-quarter reported having migrated to online gambling. Making micro-transactions was the only unique predictor of migration from social casino gaming to online gambling.

Countries are starting to look at how their legislation deals with loot boxes, with some opponents of loot boxes looking to have them classified as gambling, and therefore subject to the gambling control legislation of the country. In New Zealand, the Department of Internal Affairs is of the view that loot boxes do not meet the legal definition of gambling[38], mainly due to the idea that loot boxes are purchased so their contents can be used within the game (even if the contents are unknown). They are not purchased by users seeking to win money or something that can be converted into money.[39]

6.5.3 Most gamblers will gamble both on land and online

Online-only gamblers are in the minority, the majority gamble both online and on land. The 2014 NGS found that very few gamblers in New Zealand bet solely online. Gainsbury, Russell, Blaszczynski, & Hing, (2015a) surveyed 4,594 Australian gamblers and found that 13 percent of respondents only gambled online, 31 percent only gambled offline and 56 percent gambled both online and on land.

Another Australian study by Gainsbury (2015b) found that those that participated in on-land and online gambling participated in a greater variety of gambling forms. This cohort of gamblers had a younger profile. The more gambling activities someone participates in, the more likely they are to become problem gamblers (Blaszczynski, Russell, Gainsbury, & Hing, 2016).

The mode of gambling may influence the types and number of games a gambler uses. Gainsbury et al. (2015a) found that:

- Mixed mode (both land and online) gamblers were the youngest. Mixed mode gamblers participated in the greatest variety of gambling forms.
- Land-based gamblers were most likely to play EGMs weekly.
- Online-based gamblers participated in the fewest forms of gambling on average, and had the lowest frequency of participation in EGMs. Online-based gamblers were the most likely to gamble frequently on sports or races.

Recent research has found that online only gamblers had lower rates of problem gambling than mixed mode or on land only gamblers (Gainsbury et al. 2015a). Mixed mode gamblers had higher problem gambling scores, higher levels of gambling involvement in gambling, and higher consumption of alcohol when gambling than online only (Blaszczynski et al. 2016).

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[38] Gambling, as defined in the Gambling Act 2003, means paying or staking consideration, directly or indirectly, on the outcome of something seeking to win money (or money's worth) when the outcome depends wholly or partly on chance.

[39] https://www.gamasutra.com/view/news/311463/New_Zealand_says_lootboxes_do_not_meet_the_legal_definition_for_gambling.php, last accessed 31 January 2018.

Mixed mode gamblers were also more likely to attribute gambling problems to sports betting, and multiple account holders were more likely to be moderate risk or problem gamblers (Gainsbury et al. 2015a).

6.5.4 Online EGMs

Hing, Russell, & Browne, (2017) surveyed 4,594 Australian gamblers to determine the risk factors for problem gambling (using PGSI) on online EGMs, race and sports betting. Problem/ moderate gamblers on each of these online forms were compared to non-problem/low risk gamblers who had gambled online in the last 12 months. Three-fifths of this cohort had gambling problems before gambling online. Problematic online EGM gamblers were significantly more likely to participate in more forms of gambling compared to problematic online sports and race gamblers. Problematic online EGM gamblers were more likely to think they needed help, or had sought help, than online race and sports betting problem gamblers.

The authors state that the online EGM problem gamblers were significantly more likely to be experiencing psychological distress parallels findings for land-based EGM gamblers.

Summary conclusion

Problem gamblers are more likely to be Maori, Pacific or Asian, they are more likely to smoke, drink and use other drugs. Inequities persist in the proportion of gamblers who are problem gamblers with Maori and Pacific having greater proportions of moderate-high risk and problem gamblers than non-problem gamblers.

Gambling is linked with a number of psychotic disorders ranging from alcohol and nicotine dependence, to behavioural disorders. Research with psychosis patients revealed they were four times more likely than the rest of the population to have a gambling problem. The research findings would seem to substantiate the need to screen for gamblers in other mental health and addictions services, as well as screening problem gamblers for other mental health and addiction issues.

Of people receiving gambling intervention services in 2015/16, almost half identified EGMs outside of casinos as a primary gambling mode and a further 9 percent identified casino EGMs as their primary mode (Figure 23). The 2016 HLS found that almost half of respondents (49%) who played EGMs in a pub or club at least monthly experienced at least some level of gambling harm.

In research aimed at youth (Rossen et al. 2016a and 2016b) it was found that those with co-existing mental health issues (e.g. depression and suicide attempts), other addictive/risky behaviour (e.g. use of alcohol and weekly cigarette smoking) and being in a sexual minority may also be at a heightened risk of problem gambling. Students with 'more unhealthy' gambling behaviour had significantly higher depression scores and significantly lower wellbeing scores than students who were gambling at 'less unhealthy' levels.

Gaming addiction has been recently defined by the World Health Organization as a mental health disorder[40]. However despite some structural similarities a recent study by Macey and Hamari (2018)[41] found that games do not, in themselves, act as developmental pathways to gambling. This is an area worth monitoring for further research and development.

Online only gamblers are in the minority and so traditional intervention methods will still reach the majority of gamblers at this present time. However with technology continually evolving, and an increase in online gambling products (such as Lotto's instant app) this is a space to watch closely.

[40] http://www.who.int/features/qa/gaming-disorder/en/

[41] 613 respondents to an international online survey, only 6.2% of participants were female, 58.1% aged 25 and under

7. There are gaps in service delivery

7.1 Introduction

The 2016 HLS estimated that approximately 6,000 New Zealand adults experienced problem gambling (as measured by the PGSI). A further 55,000 were moderate risk gamblers.

Comparing this with the 4,274 gamblers that received full, follow-up or facilitation services in 2016/17 suggests that services are not reaching all those experiencing the most harm (as measured by the PGSI). Brief interventions were provided to 1,821 gamblers and 3,516 affected others.

The Ministry contracts with a number of providers nationally and regionally to deliver interventions as outlined in Box 2 below. The service data analysis shows that not all those who may ned series are reached by current providers.

Box 2 Overview of Ministry of Health contracted services

- **Helpline and information services (Gambling Helpline)**

The focus of helpline and information services is to provide an accessible information and intervention service to individuals experiencing gambling harm who are unable to access face-to-face intervention services.

The helpline services complement face-to-face services, because they are open longer hours and provide anonymity for people concerned about their privacy. In many cases, the helpline may represent a first point of access for a person who will later receive face-to-face support.

- **Brief interventions**

Brief intervention services are for people early in the course of developing gambling problems. The focus of this service is people who are at risk of gambling harm and who may be experiencing some of the effects of such harm, but who do not yet associate their gambling with the problems in their lives. The services aim to encourage individuals experiencing harm from gambling to recognise and acknowledge the consequences of their gambling and to change their gambling behaviour or seek specialist support where necessary.

- **Full interventions**

Full intervention services are community-based assessment and intervention services for people with gambling-related problems. They aim to minimise problem gambling-related harm to the service user and their family/whānau and significant others by providing a range of psychosocial interventions.

Full intervention services make up the core clinical work that most face-to-face intervention staff engage in every day.

- **Facilitation services**

Facilitation services involve minimising gambling-related harm to individuals and their families/whānau and significant others by facilitating people's access to health and social services.

Many people presenting at gambling services have more problems in their life than just gambling; sometimes they are connected to the gambling and sometimes they are separate from the gambling.

Facilitation services recognise that merely referring someone to another service is not usually effective. Active effort and support are often required to help clients to receive the support they need for other problems in their life.

- **Follow-up services**

Follow-up services provide follow-up and motivational support to clients for 12 months after their last full intervention session with a problem gambling intervention service (i.e., from full intervention or facilitation services).

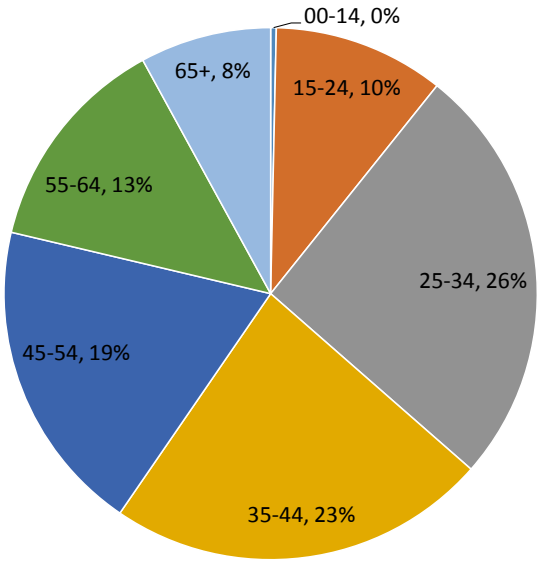
Many people recovering from addiction benefit from support even after having received intervention services. The focus of follow-up is for the practitioner to maintain contact with clients for a year after they have stopped coming to scheduled sessions and to continue to offer support and to motivate the client.

Source - https://www.health.govt.nz/our-work/mental-health-and-addictions/problem-gambling

7.2 Half of intervention clients are aged 25-44 years

The age profile of clients accessing intervention services in 2016/17 is presented in Figure 24. Collection of age data has improved consistently over time and only 4 percent of clients did not have age recorded in that year. Around half of all clients were aged between 25 and 44 years, adults aged 45-64 years accounted for one-third, young people aged 15-24 years accounted for 10 percent, and older adults aged 65 years and over just 8 percent.

Figure 24 Total clients assisted by age, 2016/17



Source: Ministry of Health

Population-based rates per 100,000 (Figure 25) show that 35-44 year olds and 25-34 year olds have the highest rate of problem gambling service use and 15-24 year olds have a substantially lower rate.

We can derive the age distribution of moderate-risk to problem gamblers from prevalence estimates in the 2016 HLS:

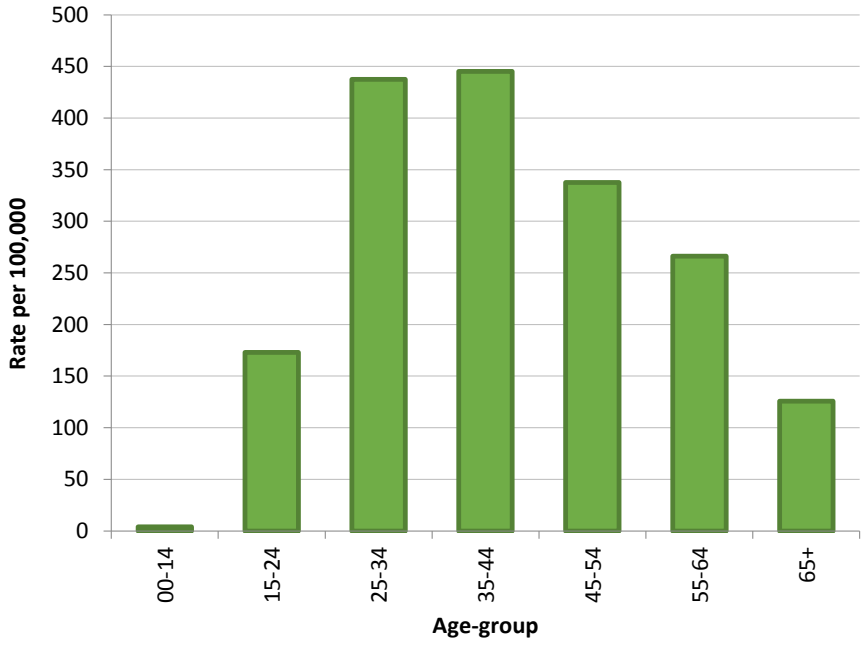
- 22 percent were aged 15-24 years
- 31 percent were aged 25-44 years
- 47 percent were aged 45 years and over

We might expect the proportions in each age-group to be similar for service users, but a proportional comparison suggests that young people 15-24 years are under-represented and 25-44 year olds are over-represented.

Figure 26 shows the number of clients receiving full, facilitation, or follow-up services over time. We noted that the collection of age information has improved over the period and some of these trends will reflect improved data capture.

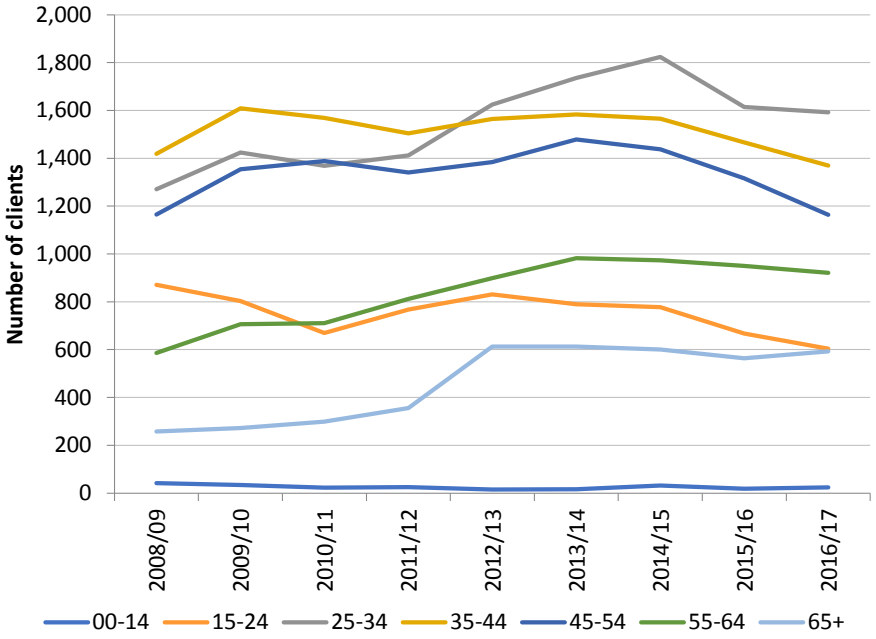
Client numbers in most age-groups have decreased in the most recent two years, with the exception of people aged 65 years and over and the very small number of children.

Figure 25 Total clients assisted, rate by age-group, 2016/17



Source: Ministry of Health

Figure 26 Clients by age over time (excluding brief interventions)



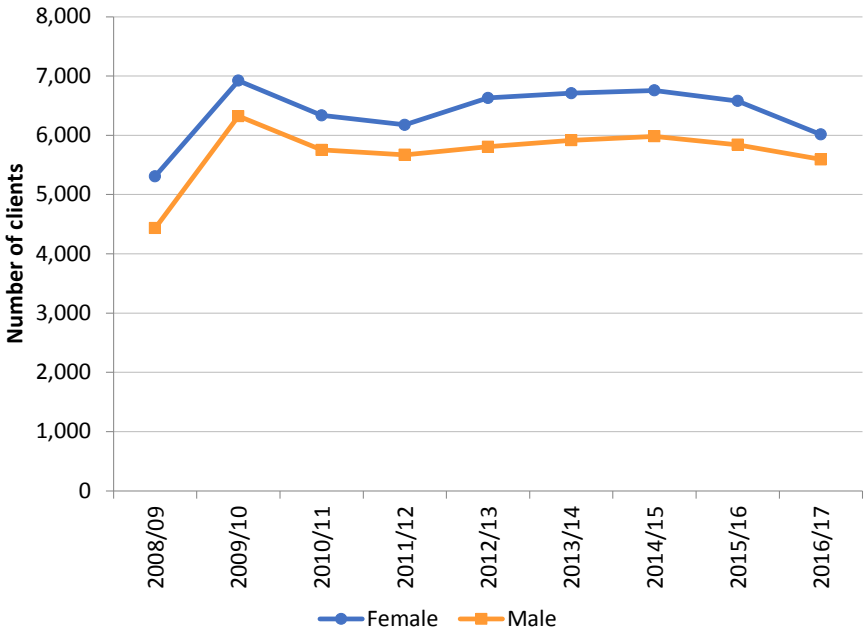
Source: Ministry of Health

7.3 Males are under-represented in problem gambling services

The 2016 HLS estimates the prevalence of gambling harm amongst the New Zealand population. Of females in the New Zealand adult population, 4 percent are estimated to have experienced some form of gambling related harm in the last year, with 1 percent classed as a moderate-risk or problem gambler according to the Problem Gambling Severity Index (PGSI). For males, 6 percent had experienced some form of gambling related harm and 2 percent were classed as a moderate-risk or problem gambler.

Although prevalence is higher amongst males, overall, females access problem gambling services more frequently, accounting for 52 percent of all clients in 2016/17 (Figure 27). There has been relatively little change in this ratio over time, with females consistently making up just over half of all clients, although the decline in client numbers was greater for females compared to males in the most recent year.

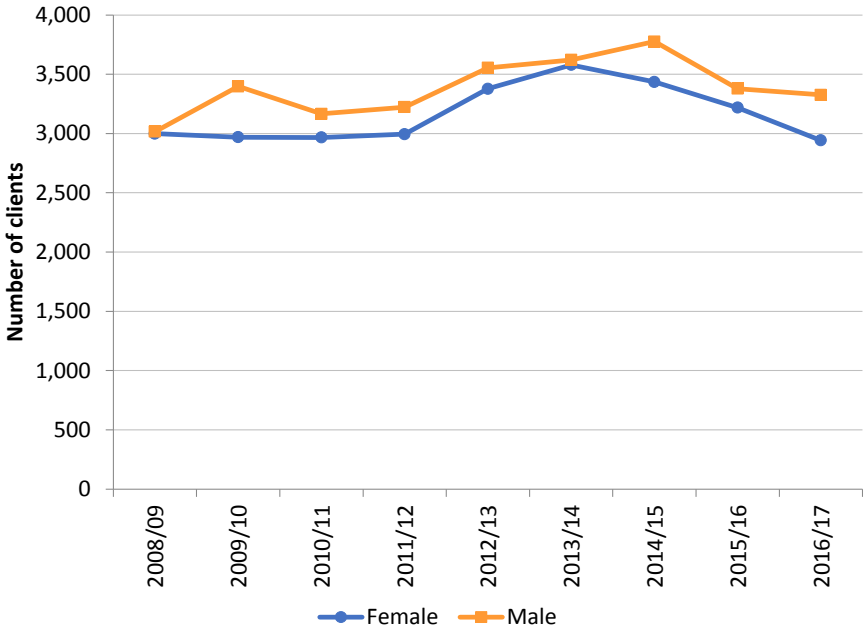
Figure 27 Total clients assisted by gender



Source: Ministry of Health

Figure 28 excludes brief interventions from the client counts. When we consider just clients receiving interventions relating to problem gambling the pattern reverses, with males representing just over half of clients each year (53% in 2016/17). This could in part be explained by a more women seeking support as 'affected others'.

Figure 28 Clients assisted by gender (excluding brief interventions)

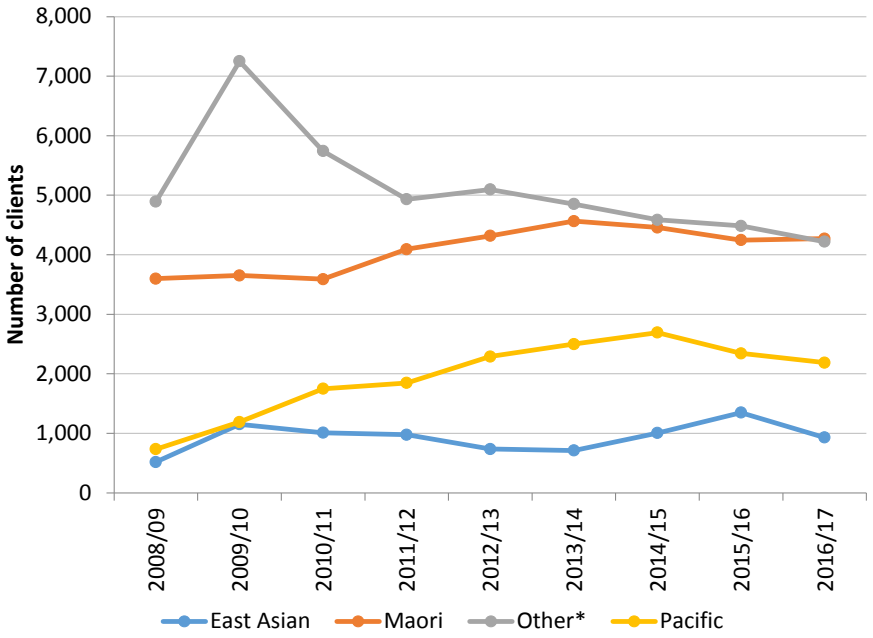


Source: Ministry of Health

7.4 Pacific people are more likely to access intervention services compared to other ethnic groups

The total number of clients by ethnicity is shown over time in Figure 29. The total number of Pacific clients has increased substantially over time despite a recent decrease. The total number of Māori clients has also increased. Some of the increases could be due to improved ethnicity data collection over time.

Figure 29 Total clients assisted by ethnicity



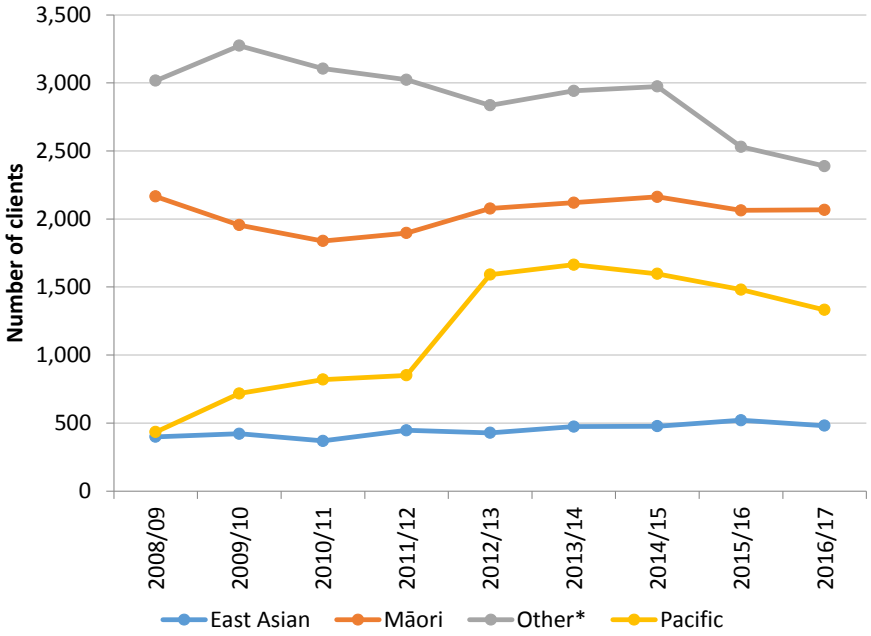
Source: Ministry of Health

* Other includes New Zealand European and ethnic groups not otherwise specified

Figure 30 excludes brief interventions from the client counts to show just those clients receiving full, facilitation, or follow-up interventions for problem gambling. There has been little change overall in the numbers of Māori and East Asian clients, whereas clients of "Other" ethnicity have declined over the last eight years. Again, some of this could be related to fewer people with unknown ethnicity.

For Pacific people, there was a step-change increase in 2012/13, although the number of clients has reduced slightly since then.

Figure 30 Clients assisted by ethnicity (excluding brief interventions)



Source: Ministry of Health

* Other includes New Zealand European and ethnic groups not otherwise specified

Of total clients assisted in 2016/17, 37 percent were Māori, 19 percent were Pacific people, 8 percent were East Asian, and 36 percent were of other or unknown ethnicity. Māori and East Asian make up a higher proportion of brief interventions and Pacific people a lower proportion.

We can derive the age distribution of moderate-risk to problem gamblers from prevalence estimates in the 2016 HLS:

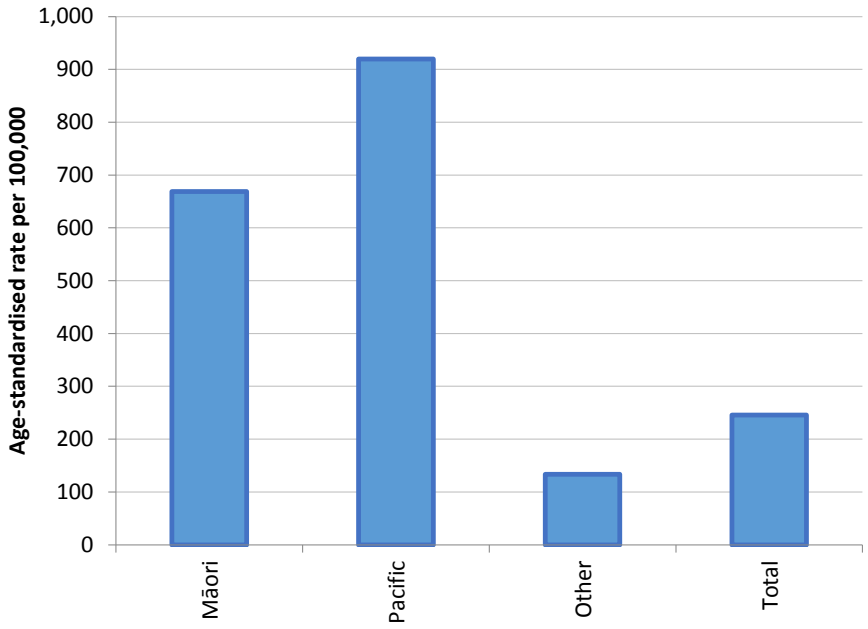
- 37 percent were Māori
- 6 percent were Pacific people

We might expect the proportions in each ethnic group to be similar for service users, yet a proportional comparison suggests that Pacific people are over-represented in problem gambling intervention services overall, and that Māori are under-represented.

Interestingly, Pacific people have a slightly higher prevalence of low risk gambling than other ethnic groups, so they could possibly be seeking help earlier, but this has not been tested.

Age-standardised population based rates are presented in Figure 31 and show that Pacific people have the highest rate of problem gambling intervention service use.

Figure 31 Age-standardised rates by ethnicity, Jul 2014-Jun 2017



Source: Ministry of Health

1. Population denominators are Statistics NZ projections prepared according to assumptions specified by the Ministry of Health. Reference population is Total NZ estimated resident population 2013.

7.5 The Gambling Helpline receives over 4000 calls per year

The Gambling Helpline is now part of the National Telehealth Service which commenced (with a new provider) in November 2015.

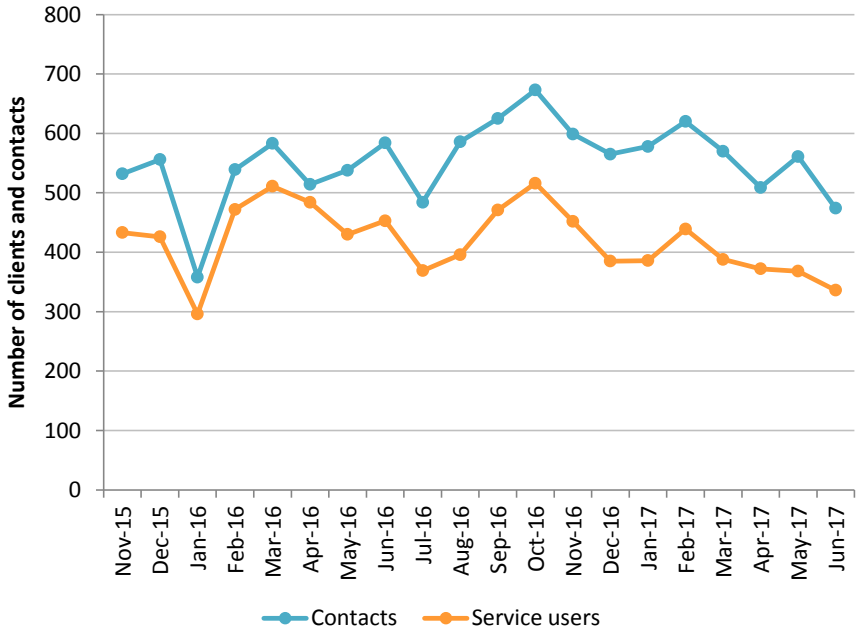
The majority of Helpline contacts are for general information, support, or referral. Service users contact the service by phone, by SMS text message or by email. A small number of service users use the chat functionality on the website. In 2016/17, 4308 people contacted the Gambling Helpline generating 6844 contacts; an average of 1.6 per person.

The 2016 HLS estimated that approximately 186,000 New Zealand adults experienced some level of gambling harm (as measured by the PGSI). Within this 55,000 reported moderate risk gambling and 6000 problem gambling. Only a very small proportion of those affected by gambling call the Helpline.

Demographic information is not collected for all calls, many callers prefer to remain anonymous or provide only a first name. The Gambling Helpline provider reports that by the end of 2016/17 around 80 percent of people have some demographic data collected. Within that, a number decline to supply some information. Gender was reported for 85 percent of callers – just over half were females. Age and ethnicity are not reported for around half of callers, and DHB is unknown for 85 percent of callers.

We summarise monthly data below from Gambling Helpline reports (Figure 32).

Figure 32 Gambling Helpline clients and contacts



Source: Homecare Medical Ltd

Some Helpline contacts are interventions and these are also counted within the problem gambling intervention service data (although the number included is small).

7.6 Self-help tools

There are alternatives to traditional treatment services available which will not capture demographic data on its utilisation. Many gamblers who recognise they have a problem may adopt self-management techniques and tools from the internet, from provider websites or from the Health Promotion Agency's Choice not Chance website which is funded by the Ministry of Health. Pre-committing how much time or money they will spend and venue exclusion is an example of commonly used tools. Three systematic reviews (Ladouceur et al., 2017; Harris and Griffiths, 2017; and Tanner, Drawson, Mushquash, Mushquash, & Mazmanian, 2017) found some evidence that limit setting may be effective (e.g. monetary or time limits). Ladouceur et al. (2017) noted that it may only be effective for some individuals, and can increase problems for others. They urge careful consideration of the potential consequences of these efforts. Harris and Griffiths (2017) notes that limit setting research does not address the issue of gamblers being able to switch gambling platforms once limits are reached. There are also drop-in peer support groups (such as Gamblers Anonymous using a 12 step process) available in some areas.

The Australian Productivity Report (The Productivity Commission, 2010) stated that less than 15 percent of people impacted by gambling would attend traditional problem gambling services. There may be a number of reasons for this, ranging from stigma and shame preventing people from seeking help, to an unwillingness to recognise that gambling is a problem (Suurvali, Cordingley, Hodgins, & Cunningham, 2009). Hence why so many are at crisis point when they seek support, much the same as any addiction. Some may use alternative supports to manage their own gambling or some may not think that the services

are right for them. Without asking gamblers who do *not* receive treatment what help they would seek, accept, or need, it is difficult to know how to reach them or what to offer to them.

In the provider workforce survey, it was expressed as some gamblers seeing treatment services as 'punitive':

> *"Stigma and taboo around talking about gambling. Working with industry, for example the casino who have told us their 'customers' see counselling as punitive. It appears that within the exclusion process at the casino the message about being excluded versus the benefits for clients of exploring their patterns of gambling are being confused. They tell us clients see counselling as punitive as opposed to the exclusion process being punitive or unfair."*
>
> *Quote from workforce survey*

As many problem gamblers do not seek treatment, self-guided interventions were developed to help reduce barriers and expand accessibility. Goslar, Leibetseder, Muench, Hofman, & Laireiter, (2017) conducted a meta-analysis on the efficacy of face-to-face versus self-guided treatments for disordered gambling and included 27 randomised controlled trials (RCTs). These self-guided treatments were more structured than freely available internet tools and techniques, and were commonly delivered in an autonomous manner through phone, the internet or other media sources. For example a single session of motivational interviewing delivered over the telephone, in combination with a mailed cognitive behavioural therapy (CBT)-based workbook.

The authors found significantly higher effect sizes regarding the reduction of problematic gambling behaviour for face-to-face treatments compared to self-guided treatments. They also found that the intensity of the treatment moderated the therapy effect, particularly for self-guided treatments. The authors noted that most studies examining self-guided treatments did not report separate data for different degrees of symptom severity and encourage future studies to report separate data for problem/at-risk and pathological gamblers. The authors also noted that only a limited number of studies looked at comorbidities, so this was not addressed in their analysis.

While there were high effect sizes found for face-to-face treatments, that is not to say that brief interventions with a self-help component will not have an effect.

Two studies funded by Ministry of Health investigated the effectiveness of telephone-based interventions. A randomised controlled trial (RCT) compared four types of telephone-based interventions, and an uncontrolled extension of the trial was also investigated that looked at the standard helpline intervention only. This study looked at the previous provider of gambling helpline services (Gambling Helpline Ltd). There is a new provider (Homecare Medical) that has provided the services since November 2015.

In the RCT study, 172 participants aged 18 and over were followed up 36 months after receiving the intervention (462 initially received the intervention, but 290 were lost to follow-up). The four types of interventions studied were (from least to most intensive treatment):

- standard helpline intervention
- single motivational interview
- single motivations interview plus cognitive behavioural self-help workbook

- single motivations interview plus workbook and four follow-up motivational telephone interviews.

In the uncontrolled study, 150 participants aged 18 and over received the helpline's standard care intervention – a single telephone intervention. 60 participants were followed up at 36 months, representing a 40 percent retention rate. At baseline, most participants (89%) cited EGMs as their main mode of problem gambling.

For the RCT, at 12 months post-intervention, there were no outcome differences between the four treatment groups. At 36 months, clinically significant outcomes were sustained and were similar between the four groups apart from two measures. Participants receiving the most intensive treatment had improved outcomes after 36 months compared with participants

- The percentage of problem gamblers (past 12 month time frame) at 36 months was lower in the most intensive treatment group (24%) than the other groups (41 – 48 %).
- The median PGSI score for the most intensive treatment group was 1 (low-risk) compared to the other groups with median scores of 3 to 7 (moderate-risk). Median score at baseline was 17.

The authors note that these findings indicate that while 'more' (in terms of intensity of intervention) is not better than 'less' in the short to medium term, it may be better in the longer term.

Similar findings were identified in the uncontrolled trial. Participants improved from baseline to 12 months and continued to improve, or outcomes were sustained, from 12 to 36 months. Problem gambling severity (past 12 month time frame) median score reduced from 17 at baseline to five at 36 months. There was significantly greater improvement for those who were partnered and had not previously received treatment for a gambling or mental health problem.

Throughout the RCT, moderate numbers of clients in all groups reported receiving additional professional treatment for problem gambling and for other mental health disorders (ranging from 4 to 15 percent). Those who received additional professional help did not have better outcomes than those who did not. However, the authors note that this does not mean that they did not benefit from the additional treatment. They may have been people who required additional help and who, without it, would have had worse outcomes. A similar finding was identified in the uncontrolled trial where additional formal gambling treatment was sought in about a third of cases, but this was not associated with better outcomes.

7.7 Financial education

There is little research on the impacts of financial capability education on problem gambling, both in New Zealand and internationally (Malatest International, 2016). With this in mind, Malatest International evaluated Sorted Whānau, a pilot 10 week financial capability programme delivered in a group setting. The programme was provided to 10 Māori or Pacific clients who had or currently were receiving treatment for problem gambling, or were significant others of problem gamblers. The findings of the study are limited due to the small number of participants. Additionally, clients were only followed for a short time after completion of the programme.

At the end of the programme, all clients were more confident about how to deal with day-to-day money matters, felt more in control of their financial situation, and were ready to improve their current financial situation. Clients agreed that the programme was useful in helping them to manage their gambling and described how the programme had positively influenced their thoughts and preoccupation with gambling. Nearly all clients said they had shared what they learnt from the programme with family and friends. They also said that supportive relationships and bonds were developed among the programme group.

The authors looked at implications for extending the programme and suggest that:

- Provider support and belief in incorporating financial capability education as part of a holistic model of treatment is essential. Providers must be willing partners in co-designing and delivering the programme.
- A multi-agency approach is required, and time should be invested in building and maintain trusting relationships across agencies.
- Programmes initially need to be 'marketed and promoted' to clients.
- The programme should be restricted to groups of 10-15, and opportunities for family participation should be included. A requirement for mandatory participation is unlikely to result in an effective programme.

Summary conclusions

The service utilisation analysis shows that males are under-represented in problem gambling services and Pacific people are more likely to access intervention services compared to other ethnic groups. The Gambling Helpline is a well-known resource and receives over 4000 calls per year. However there is limited data available as to who is accessing the service.

The Australian Productivity Report (The Productivity Commission, 2010) stated that less than 15 percent of people impacted by gambling would attend traditional problem gambling services. There may be a number of reasons for this, ranging from stigma and shame preventing people from seeking help, an unwillingness to recognise gambling is a problem (Suurvali et al., 2009). Which is why so many are in crisis point when they seek support, much the same as any addiction, some may use different supports to manage their own gambling or some may not think that the services are right for them.

Without asking gamblers who do *not* receive treatment what help they need it is difficult to know how to reach them. Similar investigating further into what is working for Pacific clients may offer insights into new models.

There are also alternatives to traditional treatment services. Many gamblers who recognise they have a problem may adopt self-management techniques and tools from the internet (through provider websites or national public health campaign websites) or attend a peer support group. Consideration for alternative methods for treating problem gamblers and supporting those that are harmed should also be considered.

One alternative intervention which has been tested in a small pilot is a financial capability programme provided positive results for participants regarding their financial issues and managing their gambling.

8. Service utilisation is geographically uneven

8.1 Introduction

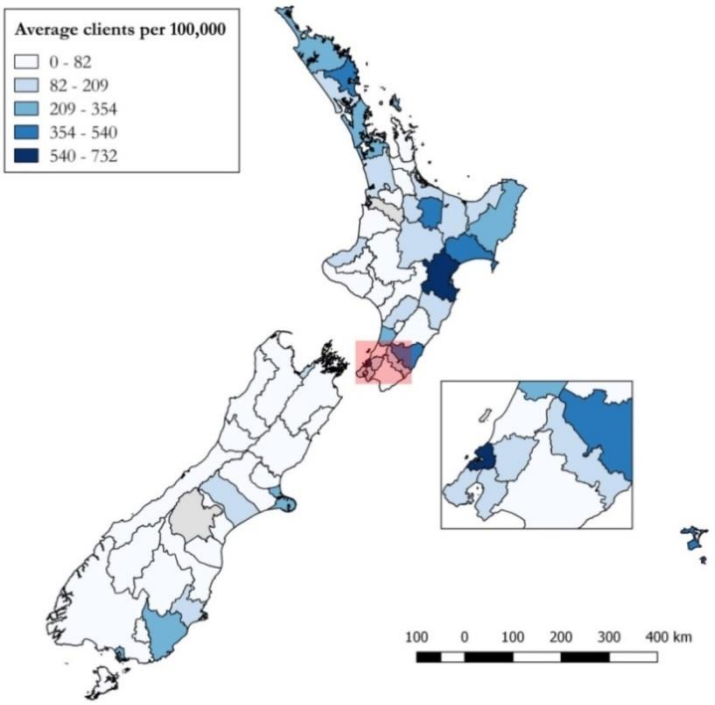
In this section the service utilisation data are analysed from a geographical perspective to see whether treatment services provide national coverage. Service utilisation is considered as a rate of clients against the population, and also against gambling expenditure to identify where there could be gaps in service delivery.

8.2 Substantial variation in service use across the country

Capture of geographical area is very good in the data, with territorial authority (local council area) recorded for almost 99 percent of clients over the last three financial years.

In Figure 33, the rates of the average number of clients per 100,000 population are displayed on a map to show at a glance where the highest rates of problem gambling intervention service use are located. Note that these rates per 100,000 population are not adjusted for differing age profiles (or other factors). The highest rate of intervention service use is in Porirua, followed by Hastings. Rounding out the top ten are: Rotorua, Wairoa, Kawerau, Masterton, Napier, Whangarei, Auckland, and the Far North.

Figure 33 Map of crude rates by territorial authority, Jul 2014-Jun 2017

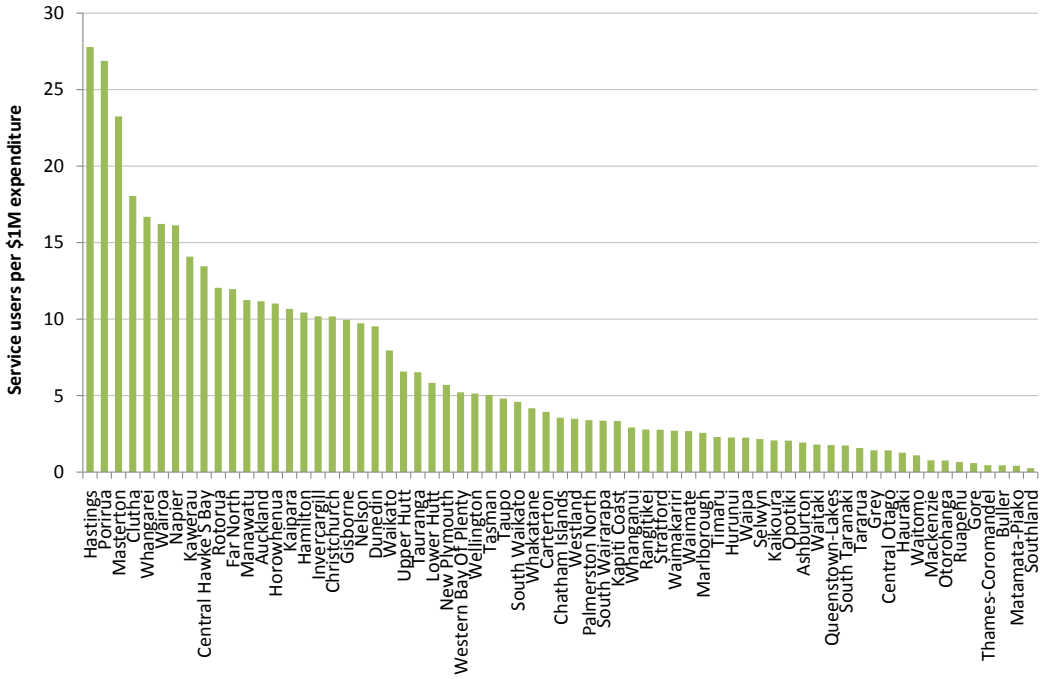


Source: Ministry of Health

To try and draw some conclusions about whether these rates of service use are appropriate (relative to other areas) or what we might expect for a particular area, Figure 34 shows service use expressed as a rate per $1 million lost by gamblers on EGMs. We are using gambling losses as a proxy for potential harm.

These rates suggest that Hastings, Porirua and Masterton do in fact have particularly high rates of problem gambling service uptake. There may be useful lessons to be learned from these areas in terms of engaging people in problem gambling services.

Figure 34 Problem gambling service users, average rate per $1M gaming machine expenditure, 2014/15-2016/17

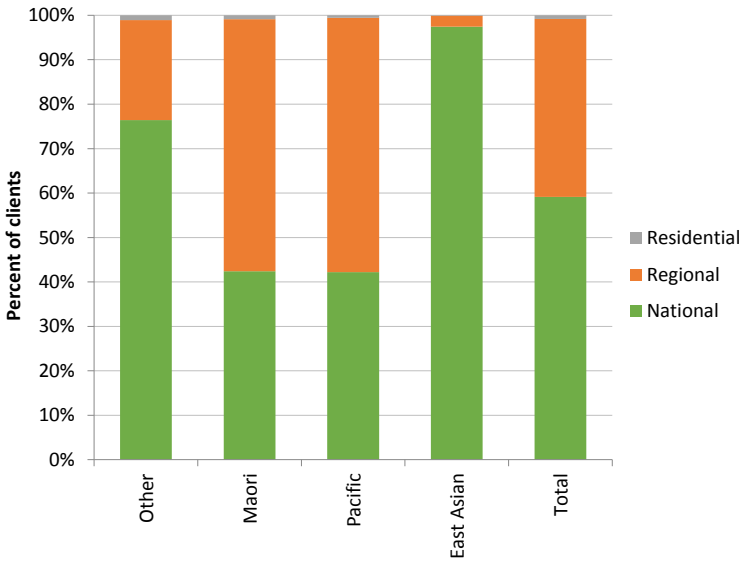


Source: The Department of Internal Affairs, Ministry of Health

8.2.1 Regional providers saw nearly half of gamblers accessing intervention services

Regional providers are mostly Māori and Pacific provider organisations, and are not present in all areas of the country. National providers deliver services to people across the country and "fill the gap" where there is no local specific provider. In 2016/17, 6,900 people used national providers (59% of total clients) and 4,600 people used regional providers (40% of total clients) (Figure 28). A small number of people used the residential service; however, these programmes are long-term in nature.

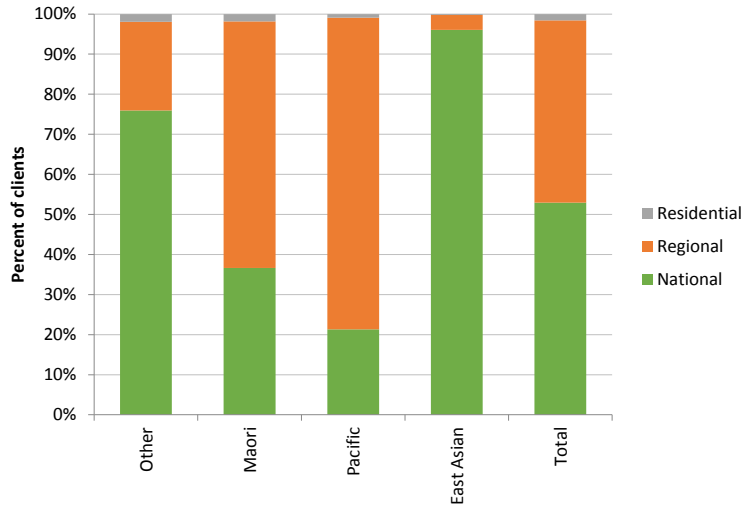
Figure 35 Proportion of total clients by provider type, 2016/17



Source: Ministry of Health

Figure 35 shows Māori and Pacific people are more likely to use regional (or cultural) services overall; and particularly so for Pacific gamblers, four-out-of-five of whom access services from regional providers. Figure 36 shows that a greater proportion of Māori and Pacific use regional providers for full and other interventions services other than briefs. Using the assumptions from the service analysis in section 7.3, this can be seen as problem gamblers accessing more regional services (for full and other intervention services) than affected others (who mainly access brief interventions). Although the figures show Asian as having a high preference for national providers, this is likely to be as the only dedicated Asian service is operating from the national mainstream provider.

Figure 36 Proportion of clients by provider type (excl. brief interventions), 2016/17



Source: Ministry of Health

We can consider differential patterns of service use alongside provider options in local areas, gaming machine expenditure (as a proxy for the potential for harm), and the demographics of local communities. Some examples are listed below:

- There are no regional providers delivering services in Canterbury or South Canterbury. Current service use in Christchurch is mid-pack compared to other TLAs (Figure 34), higher than Wellington and Dunedin but lower than Auckland. Canterbury has a smaller proportion of Māori and Pacific people and fewer people living in deprived areas. South Canterbury has an older population with few highly deprived areas.
- People living in Whanganui and Lower Hutt theoretically can access regional providers, however current service use is almost entirely through national providers (95% and 97% respectively). Service utilisation is lower than many other areas (Figure 34), gaming machine losses per capita are relatively high (Figure 17), and both TLAs have higher than average proportions of Māori (and Pacific in Lower Hutt) and those living in deprived areas.
- Some small, provincial communities with high gaming expenditure per capita (Figure 17) have very low rates of service use. For example, Thames-Coromandel, which has a high density of EGMs (Figure 13); and Opotoki, a small town with a large Māori population and high levels of social deprivation. Those who do use services in Opotiki have access to a regional provider.

It is difficult to say whether the establishment of local services would increase the number of people accessing services. The patterns of service use seen at a national level could represent greater success by regional providers engaging people in services, or a preference for local or cultural services when given a choice.

Summary conclusion

Intervention services are delivered either through two national mainstream organisations, or through local/regional providers which tend to be Māori or Pacific providers. Regional providers saw half of all clients, but not all regions have local service provision. The highest rate of intervention service use is in Porirua, followed by Hastings.

In general, Māori and Pacific people are more likely to use regional (or cultural) services; this is particularly evident with Pacific gamblers, four-out-of-five of whom access services from regional providers. A higher proportion of gamblers used regional providers (46%) compared to affected family and others, who mainly access brief interventions.

There is substantial variation in service use across the country, but this needs to be considered in relation to gambling prevalence to understand whether the absence of service utilisation is an issue or not. The data show that Hastings, Porirua and Masterton have particularly high rates of service utilisation and they also have a high rate of gambling losses. There may be useful lessons to be learned from these areas in terms of how to engage people in problem gambling services. People living in Whanganui and Lower Hutt theoretically can access regional providers, however current service use is almost entirely through national providers (95% and 97% respectively). Service utilisation is lower than many other areas, gaming machine losses per capita are relatively high, and both TLAs have higher than average proportions of Māori (and Pacific in Lower Hutt) and those living in deprived areas.

9. What did the sector say?

9.1 Introduction

As part of the needs assessment, interviews were held with eight service providers, gambling operators, and infrastructure agencies. We also carried out a small online survey of consumers. In this section their feedback is considered against a number of key themes.

9.2 Consumer feedback

Consumer feedback was gathered through a self-selecting online survey emailed by providers to their clients. See section 1.5.3 for the demographics of respondents and limitations of the survey.

9.2.1 Those who received help found it easy to access

From the sample of consumer responses (n=58) to the e-survey, the majority of consumers (81%) said that help was either quite easy or very easy to find. However, this is to be expected as the survey only went out to those who were already receiving support. For those who found it difficult, they may have never connected to services.

There were nine percent (n=10) people who still said that it was either quite or very difficult to access support. Seven felt online support through email, skype, phone or text would help, five responses indicated they would have preferred if the service could visit them, two would have preferred not to have to travel and finally, a further two would have preferred not having to take time off work. A few "other" comments indicated that they had logistical issues in getting to the appointment, services weren't available near them and that they weren't ready for help at that time.

Below are a selection of the positive comments from the consumer survey around access:

About the Helpline:

"Phone service was excellent" "Simple with Helpline offering a choice of services"

About the service provider:

"I find it hard to express how much it meant to me when I was in crisis to have an understanding, sympathetic person on the other end of the phone"

"Didn't feel judged."

"The support I have had from my counselor [sic] has really helped me a lot"

"Excellent support"

"Only that this service has helped me deal with this addiction and the consequences"

A negative comment was:

"For the assistance and support we needed was very hard to find"

This comment was in relation to gaming addiction, which is looked at in more detail in section 6.5.2.

9.2.2 Those who received help rated the service good or excellent

Over 90 percent of consumer respondents rated the service they received as either good (29%) or excellent (62%). A further eight percent rated it "ok" and one respondent rated it poor. Further positive comments were:

"Definite need for this type of service in our communities!"

"I enjoy it, it's time out and it's useful to me."

"They allow a great part of listening to really get to the nuts and bolts of things excellent"

"Knowledgable [sic] non-judgemental calming and empathetic. I'm so grateful to have had their support when going through such a difficult time"

"My support person was fantastic and a great listener and not judgemental"

"I have gone from weekly sessions to 3 weeks and am very happy with the support I have received"

"The transition from when I walked in to the service to now is amazing: out of debt; I have savings; mental balance is healthy; relationships are healthy"

Two respondents noted dissatisfaction:

"Initially great then I was not very satisfied with the counselling service"

"More focus on actual tools that help him manage his gambling would've been helpful"

The first comment is unclear as to the reason for the dissatisfaction but it is referring to services being provided remotely by skype and online to someone who lives rurally. The second respondent was seeking support with his son who had a gambling problem. They felt they were being supported but that they were not being enabled to support their son.

An evaluation of how remote services are being used and working as well as the high volume of service delivery to affected others and how they support the problem gambler could be warranted.

9.2.3 Individual counselling most preferred intervention but consumers appreciate choice depending on their point in their recovery journey

The majority of consumers (92%) received one-on-one counselling, with phone support 44%) and education about gambling (37%) being the next most common forms of support. Some also received support with other issues they were facing such as housing or health problems (21%), and 10 percent received support with money management.

On asking the questions what type of supports they would have liked to receive, most stated one on one counselling was their most preferred method, followed by telephone support (9%) and group support sessions (7%). Couples or whānau counselling and online support

was the first choice for a few respondents. No-one selected text or chat support as their most preferred method.

Other feedback on the types of intervention indicates that consumers need different interventions at different times, depending on where they are in terms of addressing their problems:

"Don't like group work and don't have a cell-phone. Like the one-on-one after getting over the anxiety. It's familiar and good to have the individual attention."

"All were worthwhile at different stages of our journey so hard to rate them as requested. My husband and I went together to couples counselling initially which was great as we could discuss what we learnt in the sessions and support each other. As time went on our problems coping with our son's gambling and failure to admit his addiction were different so then one on one counselling was more helpful. Now he has owned his gambling addiction and sought counselling himself it's great for me to have a phone call every month just in case he slips up and we have to be strong for him again."

"Personally I would have preferred privacy and support."

"Have been taking part in a skype counselling programme '5 Steps' which has been really good"

"Husband and I living rural, so did Skype video sessions and email"

"One on one councillling [sic] by far the best for me and family"

"A little easier to talk to someone by phone, rather than a first face to face meeting"

9.2.4 Other general feedback from consumers reiterated how useful they found the services:

"It helped me so much and I am grateful"

"I have pretty much stopped gambling"

"The support is really a tool bag and good advice who wouldn't listen to good advice helping others is to help yourself help yourself is to help others...Great service"

"This addiction affects not only the individual but their loved ones as well. I hope that everyone who suffers as we did has the opportunity to access the wonderful support we enjoyed at [organisation name]"

"I have had great support and my life has changed drastically, for the better, thank you all soooo much for the support"

"Totally invaluable"

"I am happy with the man I deal with"

"The service was amazing I learnt so much"

"The service is invaluable. I haven't stepped into a casino since getting help from the service"

"Gratefully it was a life-saving experience"

Some also mention how they use the service to prevent relapse:

> *"I had already stopped but came to realise I needed ongoing support to help me stop for good"*

This is an important point as the 2014 NGS found that substantial proportions of 'new' problem gamblers (23%) and moderate-risk gamblers (15%) were actually relapsed past problem or moderate-risk gambling cohorts.

As well as some suggested improvements:

> *"Would have been good to be referred to someone who does marriage counselling[sic] as obviously the gambling impacts our marriage but it wasn't in the support person's expertise to supply this. It was more about how to best manage the gambling rather than the impacts and I think it would be best if both could be addressed."*

> *"Support for a spouse"*

> *"I think needs to be more support and funding for gaming addiction as it wreaking [sic] our younger generation"*

> *"There was too much focus on following up with myself, the father rather than follow up on my son who was the one with the issues"*

9.2.5 Consumers report high use of Gambling Helpline but providers don't feel that they receive referrals from this source

Sixty percent of respondents advised that they accessed support through the gambling helpline versus 28 percent directly contacting a service themselves. However, many of the providers spoken to don't feel that they receive any referrals from the Gambling Helpline. The Gambling Helpline is now part of the National Telehealth Service which commenced (with a new provider) in November 2015.

As the service analysis showed in section 7.5, the majority of Helpline contacts are for general information, support, or referral. Some Helpline contacts are interventions and these are also counted within the problem gambling intervention service data (although the number included is small). Demographic information is not collected for all calls as many callers prefer to remain anonymous or provide only a first name. This would seem to be substantiated from the limited consumer information. However, obtaining a region from the caller would be unlikely to impinge on anonymity, but currently only 15 percent of calls collect any information regarding location. This would seem to limit the service's ability to refer to a provider closest to the client.

9.3 Service provider feedback

9.3.1 Providers know who problem gamblers are, but they won't attend treatment

In the survey of the problem gambling workforce, the three biggest challenges to delivering the services were noted as:

1. Getting the clients to attend therapy
2. Gambling not being as important as other issues the client and their whānau are facing
3. Having the right resource available to meet the client's needs (including after hours, ethnicity, gender and language)

Many providers try and approach problem gamblers or their whānau through other means and potential signs of problem gambling such as through signs of financial difficulty such as budgeting services and food banks, treatment for other addictions or intervening in family violence. Providers commented that sometimes other issues such as immediate financial crisis or other addictions need to be treated first.

9.3.2 Those who attend treatment for problem gambling are at crisis point

All providers expressed that they only see problem gamblers once they hit crisis point. By the time people seek support, they have often already caused the damage to their finances, relationships and sometimes themselves.

The use of screening tools helps problem gamblers and their affected whānau to recognise their own potentially risky behaviours. Providers have expressed success using these tools in education sessions with students and in other general public forums (i.e. not gambling specific), which has resulted in problem gamblers recognising their own behaviour and seeking support.

Some provider feedback suggests that for some newer migrants to New Zealand gambling can be seen as part of the 'kiwi culture' due to its easy accessibility and prevalence, and that it is legal. This may in part contribute to a lack of understanding of the risks, as well as stigma that surrounds people with gambling problems.

Some also suggest that the growth in Asian economic migrants, and international students, in Auckland in particular, can often become involved in casino gambling as it is a 'safe place'. Casinos are open 24 hours, employ an ethnically diverse workforce who speak their language and it's a place to explore new found freedoms from cultures where gambling may be illegal. Some economic migrants or students can lose all their funds and are reluctant to address the issues that their gambling has caused.

One of the providers identifies this as whakamā within Māori gamblers – a feeling of shame and inferiority that will impact their ability or willingness to seek help.

9.3.3 Increasing complexity of seeing clients with co-morbidities

Many providers comment on the multiple issues their clients might face, such as personality disorders and other addictions. They deal with this in different ways depending on their organisation and networks. Some of the providers sit within larger organisations that can offer mental health and other addiction services in-house, whereas others will 'facilitate' those referrals to other providers. What they all seem to acknowledge is that you can't treat one of the issues such as problem gambling, without resolving the others, however there is little research in this regard as to how to address these co-morbidities together. One provider stated that:

"Gambling is often the straw that broke the camel's back […] they were managing along with their other issues until this was added to the mix" Quote from interview

"Co-existing and complex needs is a growth area People are coming to us now with a lot more complex needs – all of them – big stuff"

The provider workforce fed back similar issues:

"Clients that come with multiple issues especially those with severe mental health issues."

"Client in denial at all time."

"Poverty, Mental health challenges (CEP better access to Mental Health Services)."

"Split role between social work and counselling with one client, self-care – working with complexity EG addictions, mental health, effects of colonisation (past and present)."

Another impact that has been expressed by providers here is 'effects of colonialisation past and present' and relating this impact as a co-morbidity.

9.3.4 Contracting full time equivalents limits ability for providers to innovate

The service specification for 'preventing and minimising gambling harm - problem gambling services' contracts for a set number of interventions per full time equivalent staff member.

Box 1 FTE Service specifications

Service specifications

The Ministry contracts for the delivery of 15 clinical hours per week per FTE. The contracts set out the number of counselling sessions that providers are expected to deliver each month.

Contracted targets are set based on the number of FTE clinicians the Ministry has agreed to purchase from each provider. In addition, targets are set for each type of intervention i.e. Brief, Full, Facilitation and Follow-up. For example, the clinical delivery expectations of a provider with 4 FTEs might be as follows where 1 FTE may be allocated per each type of intervention session:

- 1 FTE to deliver 120 Brief sessions per month (average 15 to 30 minutes each)
- 1 FTE to deliver 60 Full session per month (average 60 minutes each)
- 1 FTE to deliver 60 Facilitation sessions per month (average 60 minutes each)
- 1 FTE to deliver 120 Follow-up sessions per month (average 15 to 30 minutes each).

In practice though, 1 FTE may deliver a range of types of interventions. The delivery expectation is thought sufficient to include allowance for support such as whether the client requires third party translation for facilitation services, or working with wider whānau, or other services.

The nature of contracting for the services has been raised as an issue by many of the providers interviewed, and the workforce who were surveyed. The fixed FTE contracting mechanisms is alleged to limit opportunities for innovation and efficiencies in services delivery.

"Innovation that allows Māori to be Māori, law, regulation and policy change, cultural (the way things are done around here) change, stronger leadership with the interests of whole of whānau as paramount, values based decision making."

"MoH contract that encourages innovation."

"Narrow contracting arrangements that don't recognise the work of kaupapa Māori services."

A number of the providers interviewed, and the surveyed workforce, commented that the current contracting mechanisms and data collection processes don't capture what they do. In order to deliver services to different cultural populations such as Māori, Pacific and Asian populations they must build relationships and trust. This also sometimes involves explaining the core western concepts of confidentiality and counselling, as a fundamental part of the process which isn't factored into the contracts.

9.3.5 The contracting mechanism doesn't sufficiently allow for culturally specific requirements

The contracted approach for problem gambling services is the same for all providers and populations. As outlined in the previous section the services are purchased through the required workforce numbers to deliver a set number of interventions, regardless of whether the population being served has English as the first language, or any cultural or social barriers;

"…the biggest barrier is culture , when doing a brief it can take up to 3 sessions, the contract does not allow for nuances of a cultural approach – we're trying to get culture to fit European system […] We're working at 100% but only 40% works into CLIC system"

"Ensuring have enough staff to be able to deliver flexible services at location that suits client; need more print educational resources; hard to deliver sessions at a time and day that suits all family members and counselor."

"Limited resources (Staffing)."

"Possible resourcing of peer support workers as happens in AOD. It would add to the clinical work being achieved."

"Lack of funding to pay staff, i.e. not enough staff hours per client."

"Engaging and resources for working with family members."

Another provider also explained that some of the populations they work with do not understand the concept of "counselling" and so they have to build up trust with them first so they understand that it is confidential and safe.

Some also noted that clinical training lacked cultural competency: that the clinical training came from a very Eurocentric perspective, and didn't take into account different cultural requirements or models of health.

9.3.6 Professionalisation of the workforce is supported, but perhaps shouldn't be a top priority

One of the Ministry's strategic objectives is:

> *"A skilled workforce is developed to deliver effective services to prevent and minimise gambling harm"(p.22, MoH, 2016)*

This objective reflects the intent to develop a skilled workforce in line with the public health workforce development plan Te Uru Kahikatea 2017 – 2026 which is still under development. Public Health Workforce Development[42] is a national contract which provides resources and support to the workforce to achieve this. One aspect of that is regional training forums are held bi-annually which were seen to add value by providing inspiration and ideas.

The focus for a skilled workforce has been 'professionalisation', such as encouraging clinical registration with DAPAANZ and achieving public health competencies in problem gambling service delivery. There is generally support for this shift from the workforce, with 44 percent of the workforce survey respondents in favour, and only 7 percent against. However the remaining 49 percent of responses indicated they had no opinion, didn't know, or didn't understand the question.

9.4 Gambling operators and infrastructure

The workforce available to reduce gambling harm should be thought of more broadly than that of the service providers. All gambling venues are required to train staff in problem gambling awareness to identify problem gamblers and offer support. This legal requirement applies equally to the high street TAB, the local bowling club or the SkyCity casino.

The gambling venues and their workforce are the most obvious touchpoint for problem gamblers, yet seven out of ten people who played EGMs in 2014 did not interact with venue staff[43].

Host training varies greatly dependent on the size of venue, staff experience, and turnover. This can impact greatly on the quality and quantity of the workforce and the training they receive. At the latest DIA "mystery shopper" exercise, the sector feedback was:

> *"We are currently reviewing the effectiveness & assessment of our training – in terms of changed behaviour by frontline staff – and are aware that this is a very challenging area as staff turnover in the Hospitality sector is high." (Sector feedback on the results of the DIA Mystery Shopper exercise 2016)*[44]

In the interviews with gambling operators it was accepted that the quality of training could be variable across venues. One operator thought that one way to approach it would be to

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[42] https://hetaumata.co.nz/tekakano

[43] https://www.hpa.org.nz/research-library/research-publications/2014-gambling-report-findings-infographic

[44] https://www.dia.govt.nz/diawebsite.nsf/Files/Mystery-shopper-sector-wide-report-2017/$file/Appendix-F.pdf

offer more advanced training at specific sites which had high numbers of problem gamblers, while others felt a more consistent approach to training and a level of quality was required.

> *"We expect bars to care as much about their gambling customers as they do their drinking customers." (DIA media release - Gareth Bostock, Director of Gambling Compliance, DIA)* [45]

This is a valid point as host responsibility around the serving of alcohol to underage or intoxicated persons is much more embedded. This may in part be due to the individual's liability ($2,000 fine) as well as the licensee or manager ($10,000 fine).

Below are some additional quotes from the provider workforce on the topic:

> *"Introducing harm min hardware/limits, i.e. amount of time played, amount of money spent (before the whole pay is withdrawn and lost in the machines)…"*

> *"Harm minimization strategies being enforced properly in venues."*

> *"Provide better host responsibility at venues to encourage gamblers to take breaks and seek support."*

There was general agreement by the gambling operators that the whole sector has matured over the last few years and is now at a point where there are opportunities to work more collaboratively to improve how problem gamblers are identified and supported. The infrastructure agencies also see the opportunities to provide incentives to reward improved practices at venues, such as extended licenses. The provider workforce at the frontline is probably not at the same point currently, and will require convincing that working with, rather than against the gambling industry, may deliver better results.

Summary conclusion

The consumers who were in treatment responded they found it easy to access the service on the whole, and the majority rated the service good or excellent. A range of services had been offered to the consumers, but individual counselling was the most preferred intervention. Feedback suggests that it depends at what stage the person is at as to how they want to engage with services. For some being anonymous, and to have first contacts over the phone rather than face to face helped. As confidence grows group sessions and other options may work. There may also be a need for more specific therapies to resolve the impact of gambling harm such as relationship counselling.

Consumers report high use of Gambling Helpline in the survey, as well as the 2014 NGS stating most would contact a helpline, but providers don't feel that they receive referrals from this source. A limited amount of demographic data is collected through the Helpline, which may hinder referring to the right local services. Trying to make a first name and a region as standard collection would help an onward referral more than other demographic data for analytical purposes.

[45] https://www.dia.govt.nz/press.nsf/d77da9b523f12931cc256ac5000d19b6/33178cc3fee95905cc25814d0014f453!OpenDocument

By the time people do reach out for treatment for problem gambling they are at crisis point. It is also perceived by the workforce that clients are presenting with greater complexities and comorbidities. There is also the possibility that some problem gamblers do not want to use treatment services, and will find their own method of addressing their problem.

The providers and the problem gambling workforce had some specific feedback around the current contracting mechanism:-that it is restrictive, doesn't allow them to innovate, doesn't take into account the demands that supporting different cultural groups requires, or the breadth of work that they do.

Professionalisation of the workforce is a concept that is half supported, and half not understood. From a practical point the regional forums for the provider workforce supports collegial working and sharing of best practice. Some reasons against professional registration seem to be the workload, lack of remuneration / recognition for doing it and difficulties in actually achieving it.

Venue staff have a unique opportunity to minimise gambling harm with their pub or club patrons, however it's a role they are sometimes ill equipped to do. Gambling host responsibility does not seem to be as embedded and as effective as alcohol responsibility, likely due to a number of reasons such as personal liability including financial penalties.

There was general agreement by the gambling operators that the whole sector has matured over the last few years and is now at a point where there are opportunities to work more collaboratively to improve how problem gamblers are identified and supported. The infrastructure agencies also see the opportunities to provide incentives to reward practices at venues that exceed the minimum standards such as extended licenses. The provider workforce is probably not at the same point currently, and will require convincing that working with rather than against the gambling industry may deliver a better result.

There is an opportunity to bring together the sector to more effectively use the full breadth of resources available across the sector.

10. Summary of Findings

10.1 Introduction

The objective of this needs assessment was to document how well the provision of treatment services to minimise gambling harm aligns with the research evidence base and population needs. Throughout the rest of the report, we have highlighted the key gaps or findings along the way. This section summarises those gaps and findings against the research evidence, population needs, service provision and the goal of the Ministry's strategic plan.

The needs assessment is intended to inform service planning, one of the aims of which is to ensure an appropriate distribution of health services to promote health-gains and better outcomes for the population. What the needs assessment doesn't do is evaluate whether the services that are currently being delivered are actually achieving or contributing to the overall strategic goal: that is to prevent and minimise gambling harm, and to reduce related health inequities.

10.2 The research evidence base – only minor progress

Despite a wealth of published research and literature that covers problem gambling in New Zealand and internationally, no major breakthroughs in theory have been reported in the literature since the last needs assessment. Given the fairly short interval between needs assessments, this is not really surprising.

The current shape of service delivery in New Zealand is based around a public health model (as set out in the legislation) to address the wider harms caused by gambling, not just those for the problem gambler themselves.

Research continues in the areas of gambling participation, and gambling harm. This includes considering prevalence, gambling modes such as online and land (Gainsbury, Russell, Blaszczynski, & Hing, 2015; Thorne, Rockloff, Langham, & Li, 2016; Cox & Hurren, 2017). More recent research is investigating possible growth in online gambling (Abbott, Bellringer, Garrett, & Mundy -McPherson, 2016), and the link between gaming and gambling (Macey & Hamari, 2018). While 2014 NGS suggests that online gambling is still small in New Zealand, it would be wise to monitor that space as technology and market penetration may evolve rapidly over the next few years.

However, there still does not seem to be a definitive way of defining and measuring harm – this is important if the strategic goal is to prevent and reduce harm. An alternative screening tool to the PGSI has been proposed by Browne et al. (2017) which takes a broader look at gambling harms and therefore has the potential to identify a broader population in need. This may be worth exploring further in the NZ context.

There is still no conclusive evidence on which interventions are the most effective for problem gambling. There are three recent systematic reviews (Tanner et al. 2017; Ladouceur et al., 2017; and Harris and Griffiths, 2017) that look at in-venue strategies to reduce harm such as self-appraisal pop up messages, maximum bets, removal of large note acceptor

ATMs, and reduced operating hours. These reviews found that, while the body of research into responsible gambling strategies is growing, and initiatives can show positive effects, it is still too soon to make concrete recommendations about what responsible gambling initiatives work, and for whom.

10.3 The current service provision is underutilised and not geographically uniform

There is substantial variation in service use across the country, but this needs to be considered in relation to gambling prevalence to understand whether the absence of service utilisation is an issue or not. The demographics of the potential gambling population were calculated using the 2016 HLS prevalence data, and then access to gambling venues, gambling expenditure and service utilisation considered. This is based on the assumption that there is some relationship between gambling access/availability, participation, expenditure and harm. We note, however, that the assumed causal chain from gambling opportunity and access through to gambling harm is not yet sufficiently well understood, let alone empirically documented.

10.3.1 Opportunities to learn about service delivery models

Intervention services are delivered either through two national mainstream organisations, or through local/regional providers which tend to be Māori or Pacific providers. Regional providers saw half of all clients, but not all regions have local service provision.

In general, Māori and Pacific people are more likely to use regional (or cultural) services; this is particularly evident with Pacific gamblers, four-out-of-five of whom access services from regional providers.

These rates suggest that Hastings, Porirua and Masterton have particularly high rates of problem gambling service uptake, coupled with high gambling expenditure. There may be useful lessons to be learned from these areas in terms of engaging people in problem gambling services

The Gambling Helpline is a well-known resource and receives over 4000 calls per year. However there is limited data available as to who is accessing the service to understand if it is supporting some of the areas highlighted.

10.3.2 Potential gaps in service delivery

There are documented gaps such as males being under-represented in services, and there are geographical areas where there appears to be high gambling expenditure, and low access of services.

Canterbury was one area that it was suggested might require further services provision. However Canterbury has a smaller proportion of Māori and Pacific people and fewer people living in deprived areas. South Canterbury has an older population with few highly deprived areas. As it has median rates of gambling expenditure and service utilisation it therefore may not be a priority for additional services.

Waikato was another area which was raised as being under-serviced. However, considering the EGM density and levels of expenditure the focus may need to be on South Waikato (see Figure 17).

People living in Whanganui and Lower Hutt[46] show current service use almost entirely through national providers (95% and 97% respectively). Service utilisation is lower than many other areas (Figure 34), gaming machine losses per capita are relatively high (Figure 17), and both TAs have higher than average proportions of Māori (and Pacific in Lower Hutt) and those living in deprived areas. This may be a higher priority in terms of testing different methods of service provision.

10.3.3 Other issues to highlight

The Australian Productivity Report (The Productivity Commission, 2010) stated that less than 15 percent of people impacted by gambling would attend traditional problem gambling services. There may be a number of reasons for this, ranging from stigma and shame preventing people from seeking help, an unwillingness to recognise gambling is a problem (Suurvali, Cordingley, Hodgins, & Cunningham, 2009). This may in part explain why so many are in crisis point when they seek support, much the same as any addiction, some may use different supports to manage their own gambling or some may not think that the services are right for them.

Without asking gamblers who do *not* receive treatment what help they need, it is difficult to know how to reach them. Similarly, investigating further into what is working for Pacific clients may offer insights into new models.

There are also alternatives to traditional treatment services. Many gamblers who recognise they have a problem may adopt self-management techniques and tools from the internet (through provider websites or national public health campaign websites) or attend a peer support group. Consideration for alternative methods for treating problem gamblers and supporting those that are harmed should also be considered.

A review of the potentially relevant learnings from other mental health and addiction services was outside the scope of this needs assessment. However, during the course of our interviews, we have frequently been told of other issues that problem gamblers have, including a high likelihood of smoking and alcohol consumption, as well as other substance use which is well documented in the literature. We have heard that some gamblers first need to deal with their other issues before they can address their gambling, including meeting immediate needs such as food and shelter; furthermore, we have also been told that sometimes gambling can be the problem that *'tips the person over the edge',* that makes it all come tumbling down. This links with the lack of current knowledge about which interventions work best for problem gambling, particularly where problem gambling is one of many co-morbidities.

[46] People in Lower Hutt could potentially access regional providers in Porirua.

10.4 Alignment with Ministry's strategic plan

The overall goal of the Ministry of Health's 'Strategy to Prevent and Minimise Gambling Harm' (2016) is:

> *"Government, the gambling sector,[47] communities and families/whānau working together to prevent and minimise gambling harm, and to reduce related health inequities."*

The feedback from the gambling sector would seem to suggest that while there may be pockets of regional cooperation this is not universal, nor is there a national approach to this. Cooperation occurs between one or two sectors such as government and providers, or providers and the gambling industry, but there is not a cohesive approach or national leadership in this sense.

There is an opportunity to bring together the sector to more effectively use the full breadth of resources available and look at trialling some innovative approaches to service delivery which incorporate co-design, particularly getting feedback from problem gamblers who are not in Ministry contracted services. Some opportunities for this may be through Gamblers Anonymous group sessions, community linkages and leaders, and working with those providers who have established these relationships. It is important that new models are trialled and evaluated to establish what works and what doesn't in specific communities and scenarios and to add to the evidence base.

There are also opportunities to work with wider health and social service agencies to identify more screening opportunities across the sectors such as other Addictions teams, primary care, social services, Justice and youth workers. One aspect that has not been fully explored in this needs assessment is the physical health of gamblers, and the impact of harm, and there could be real opportunities for reaching gamblers through primary care.

Professionalisation of the workforce is a concept that is half supported, and half not understood. From a practical point the regional forums for the provider workforce supports collegial working and sharing of best practice. Some reasons against professional registration seem to be the workload, lack of remuneration / recognition for doing it and difficulties in actually achieving it (Abacus Workforce Survey, 2017).

Venue staff have a unique opportunity to prevent and minimise gambling harm with their pub or club patrons, however it's a role they are sometimes ill equipped to do. Gambling host responsibility does not seem to be as embedded and as effective as alcohol responsibility, likely due to a number of reasons.

There was general agreement by the gambling operators that the whole sector has matured over the last few years and is now at a point where there are opportunities to work more collaboratively to improve how problem gamblers are identified and supported. The infrastructure agencies also see the opportunities to provide incentives to reward practices at venues that exceed the minimum standards.

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[47] In this context, 'the gambling sector' includes commercial and non-commercial gambling operators (including the NZRB and the NZLC), member associations such as Clubs New Zealand and Hospitality New Zealand, operators of gambling venues (including publicans and operators of retail outlets), providers of services to prevent and minimise gambling harm, and gambling researchers.

10.5 What are we missing?

10.5.1 We don't know the efficacy of the services

This needs assessment has identified some gaps in the delivery of treatment services gamblers; however, these gaps only document whether services are being delivered to populations in need, that is, the focus is on the quantitative dimension. What the needs assessment does not address is whether and to what extent the services that are currently being delivered are *effective* in reducing and minimising gambling harm, that is, the needs assessment does not address the more qualitative, evaluative dimension. Such an evaluation would seem to be a critical input into the planning and further development of gambling harm minimisation services.

10.5.2 We don't know what the patterns of consumption are

Much of the information published about gambling is focused on reporting average annual per capita expenditure and the development of this measure over time. Unfortunately, this is not very helpful for the purposes of developing harm prevention and reduction strategies because the patterns of gambling participation and expenditure are most likely highly skewed, in that a large number of people do not gamble at all, and a small number of gamblers spend very substantial amounts of money.

At present, we can build an anecdotal picture of a typical gambler ("A day in the life of a Problem Gambler"), but in the real world, there are many different kinds of "typical gambler" and we cannot substantiate our picture with robust empirical data that would allow us to identify those typologies, and to design and deliver treatment services that are appropriate to, and effective in, their particular circumstances.

What is needed is a refined and in-depth empirical analysis of the patterns of gambling consumption: who gambles how much on which games, at what times, and what are the socio-demographic attributes of these people. This is important because financial loss is a key driver of gambling harm; it can trigger emotional, psychological, relationship and other social harms.

Some of the data required to drive such an analysis will already be available through HLS and NGS; missing data could be potentially be generated by means of a dedicated consumer panel focused on detailed recordings of gambling expenditure, or by adding relevant questions to the HLS or another suitable omnibus market research vehicle.

10.5.3 We don't know what problem gamblers who do not access Ministry services need

As discussed in section 7.6 there are alternatives to traditional treatment services available which will not capture demographic data on its utilisation. Many gamblers who recognise they have a problem may adopt self-management techniques and tools from the internet. Pre-committing how much time or money they will spend and venue exclusion are an example of commonly used tools. There are also drop-in peer support groups (such as Gamblers Anonymous using a 12 step process) are also available in some areas. There is still a gap in the literature about gamblers and how they maintain being 'gambling free', or relapse

– and what do they do when this happens, and what methods do they find best to keep them on track?

10.6 Recommendations

There are many opportunities to learn from best practice within New Zealand and create pilot service models to address service gaps. Work is needed to improve inter-sectorial relationships and make best use of the skills available within the industry as a whole to support those harmed by gambling. Below are just a few possible recommendations for further investigation:

1. Continue to fund research with a possible focus on youth, online gambling, and best practice approaches to treating problem gambling within a context of co-morbidities
2. Increase screening opportunities across the wider health and social service agencies in particular primary care and other mental health and addiction services
3. Consider whether new screening tools are more appropriate for New Zealand's public health approach such as the short gambling harms scale (SGHS) harm (Browne, Goodwin, & Rockloff, 2017)
4. Evaluate existing service provision for measurable outcomes and explore ongoing support and relapse within provider client population, and treatment for co-morbidities
5. Review and learn from those regional models which have high gambling expenditure and high service utilisation such as Hastings, Porirua and Masterton
6. Consider piloting new service models to address gaps in current service provision in areas such as Whanganui and Lower Hutt based on learnings from regional models and working in a co-design approach with providers, venues and consumers (including those consumers who are not receiving interventions)
7. Explore options for alternative interventions to reach broader populations who may not want to see a traditional service provider and how gamblers prevent and manage relapse
8. Ensure access / pathways to different types of interventions that may deal with specific harms such as relationship counselling
9. Work with Gambling Helpline to improve data collection and review referral processes
10. Work with the gambling sector to consider how venue staff are trained and supported to recognise gambling harm in a way which is effective and sustainable
11. While online gambling is small it is worthwhile considering how this may impact in the next 2-3 years as opportunities to gamble online from traditional providers (e.g. Lotto's online instant win and online offerings) increase
12. Improve the infrastructure that connects the gambling sector to:
    (a) Improve cohesion
    (b) Share best practice
    (c) Improve coordination

(d) Increase transparency

(e) Support all workforce including venue staff

(f) Share learnings and data across wider sector such as mental health and other addictions

13. Work with service providers to ensure service contracting and data collection supports cultural service delivery and create opportunities for innovation

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Appendix 1 Additional context

Legislative context

The table below outlines the legislative responsibilities for each class of gambling activity:

Table 1 Roles of central and local government in regulating gambling activity

Gambling activity	Central government (DIA)	Local government (Council)
Casino gambling	Responsible for all regulatory, licensing and enforcement activities	No control over casino gambling
National lottery		No control over gambling on the national lottery
Class 4 (pokie) venues	Sets the legislative framework (e.g. maximum number of machines per venue, rules about distribution of proceeds) Responsible for venue licensing, subject to council consent Enforcement activities	Required by legislation to have policies in place to regulate the number and location of new gambling venues in the district Responsible for consenting new venues that comply with the relevant policy
TAB venues	Sets the legislative framework Responsible for venue licensing, subject to council consent Enforcement activities	No control over TAB machines in taverns
Online gambling	No control over overseas-based online gambling websites Limited control over New Zealand based online gambling websites	No control over online gambling

Source – (Auckland Council, 2017) https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-policies/Documents/review-gambling-venue-policies.pdf

The Problem Gambling Levy

The Gambling Act 2003 legislated that a portion of the profits from the gambling sector should cover the costs required to minimise its harm. This is the gambling levy which is set every three years in conjunction with the Ministry of Health's integrated problem gambling strategy. The levy should be set at a rate which would cover the costs to implement the strategy.

The levy was first set in 2004 it has applied to gambling operators in four gambling sectors:

- NCGM operators
- casinos
- the New Zealand Racing Board
- the New Zealand Lotteries Commission.

The funding for implementing the problem gambling strategy is derived from the problem gambling levy. The problem gambling levy is set at different rates for different gambling operators. The rate of the levy is reconsidered every three years in line with the strategy, the table below shows the rate from 1 July 2016, and the rates for the previous period.

Table 2 Problem gambling levy by operator

Gambling operators	Income liable	Rate %	
		2013-2016	1 July 2016
Casino operators	Casino wins	0.74	0.87
Non-casino gaming machine operators	Gaming machine profits	1.31	1.30
New Zealand Racing Board	Betting profits	0.60	0.52
New Zealand Lotteries Commission	Turnover less prizes paid and payable	0.30	0.40

Source: http://www.ird.govt.nz/duties-levies/gaming-machines/problem-gambling/pgl-index.html

Appendix 2 Data notes

Table 3 Completeness of geographical data for gambling locations

Type of venue	Number of venues	Number geocoded	Number with NZDep2013 decile
Lotteries outlets	1467	1300	1224
TAB outlets	659		
EGM venues (pokies)	1197 (16,031 machines)	879	811
Casino	6	6	6

Source: The Department of Internal Affairs, NZ Racing Board, NZ Lotteries Commission

2. Lotteries provided October 2017, TAB as at June 2017, EGM venues as at 31 March 2017

Appendix 3 Overview of providers and regions

Table 4 Service providers by region

Region	Provider
Northland	Nga Manga Puriri
Auckland - Various locations	Salvation Army Problem Gambling Foundation - Asian Family Services - Mapu Maia TUPU (WDHB) Pasifika Ola Lelei Services Raukura Hauora O Tainui (Intervention) Odyssey House (Intervention) Hāpai Te Hauora (Public health)
Waikato - Hamilton - Tokoroa - Taupo	Salvation Army Problem Gambling Foundation
Bay of Plenty - Tauranga - Rotorua	Salvation Army Problem Gambling Foundation Te Kāhui Hauora Trust
Gisborne	Te Ara Tiki
Hawkes Bay	Te Rangihaeata Oranga Trust
Taranaki - Stratford - New Plymouth	Salvation Army Problem Gambling Foundation Tui Ora Taranaki (Public health)
Manawatu-Whanganui - Whanganui - Palmerston North - Levin/Kapiti	Salvation Army Problem Gambling Foundation Best Care (Whakapai Hauora) Charitable Trust Nga Tai O Te Awa Trust Whanganui (Public health)

Region	Provider
Wellington - Porirua - Upper Hutt - Lower Hutt - Wairapapa	Salvation Army Problem Gambling Foundation Taeaomanino Trust (Porirua) Te Rūnanga O Toa Rangatira Incorporated (Ora Toa Mauriora) (Porirua)
Tasman	
Nelson	
Marlborough	
West Coast	
Canterbury - Christchurch - Ashburton - Rangiora - Geraldine - Waimate - Timaru	Salvation Army Problem Gambling Foundation Woodlands Trust
Otago - Oamaru - Dunedin - Balclutha	Salvation Army Problem Gambling Foundation Te Roopu Tautoko Ki Te Tonga Inc (Public health)
Southland - Invercargill	Nga Kete Matauranga Pounamu Charitable Trust

Appendix 4 Problem gambling public health competencies

There has been a push in recent years to professionalise the public health workforce who support the minimisation of gambling harm. A set of eight core competencies have been developed which are service/professional specific and extend beyond the generic core competancies….

Public health competencies[48]	Problem gambling competencies[49]
Public Health Knowledge 1. Health Systems 2. Public Health Science 3. Policy, Legislation, and Regulation 4. Research and Evaluation 5. Community Health Development **Public Health Practice** 6. Te Tiriti o Waitangi 7. Working Across and Understanding Cultures 8. Communication 9. Leadership, Teamwork, and Professional Liaison 10. Advocacy 11. Professional Development and Self Management 12. Planning and Administration	Leadership and Communication, Understanding of Sector and Community Relationships, Research and Evaluation, Planning and Administration Skills, Public Health Approaches to Harm Minimisation, Gambling Legislation and Regulation, Māori Health Models and the Treaty of Waitangi, Community Action and Diversity.

[48] Public Health Association of New Zealand (Undated) 'Generic Competencies for Public Health in Aotearoa-New Zealand' Retrieved from http://www.publichealthworkforce.org.nz/data/media/documents/Competencies/WEB%20-%20Generic%20Competencies%20for%20Public%20Health%20March%202007.pdf

[49] Competencies provided via email communication with the national workforce coordinator