From Problem Gambling to Gambling Harms:
Moving to a New Framework

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Overview

1. Background
2. Public Health: A very brief history
3. Three Decades of Development
4. Operationalizing Public Health Model
5. Next Steps and Opportunities

pubmed.ncbi.nlm.nih.gov/33432287

REVIEW ARTICLE

Charting a path towards a public health approach for gambling harm prevention

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Received: 2 June 2020 / Accepted: 20 November 2020

Abstract

Aim Gambling harm is a serious public health issue affecting the health, financial security, and social well-being of millions of people and their close relations around the world. Despite its population health implications, gambling harm is not typically viewed and treated as a public health policy issue. This paper critically reviews the evolution of the public health perspective on gambling harm. It also considers how gambling harm can be operationalized within a public health model.

Methods A critical historical review of the emerging public health perspective on gambling harm was conducted. Key documents covering three decades of development were reviewed and appraised through a process of deliberation and debate over source impact in the fields of research, policy, and programming internationally.

Results The first decade mainly focused on identifying gambling harm and framing the public health issue. The second decade featured the expansion of health assessment and emerging areas of policy and program development. The third decade saw an increased focus on public health frameworks that advanced understanding of harm mechanics and impact. As reflected by the *essential functions* of a general public health model, gambling harm prevention efforts emphasize health promotion over other key functions like health assessment and surveillance.

Conclusion Gambling harm is a public health issue requiring greater attention to health assessment and surveillance data development.

Keywords Gambling harm · Public health model · Essential functions · Critical review · Health assessment · Surveillance

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Introduction

The development of modern public health models began nearly 200 years ago. This health service paradigm has significantly shaped how we prevent, prepare for, and treat human health conditions at an individual and population level. Gambling-related harms, however, have not garnered the same level of attention from these health service models as other acute and chronic health conditions. Despite these circumstances, the resources, knowledge, and skill sets embedded in public health systems and models may offer substantial benefits for addressing gambling harms.

Gambling harms constitute a serious public health issue. Worldwide, an estimated 0.1% to 5.8% of adult populations experience serious problems with gambling (Calado and Griffiths 2016). Although the health, economic, social, and personal harms of gambling are most severe among problem gamblers, they can extend across the risk spectrum (Blaszczynski 2009; Browne et al. 2016; Langham et al. 2016). Further, the impact of these harms affects not only

Published online: 07 January 2021

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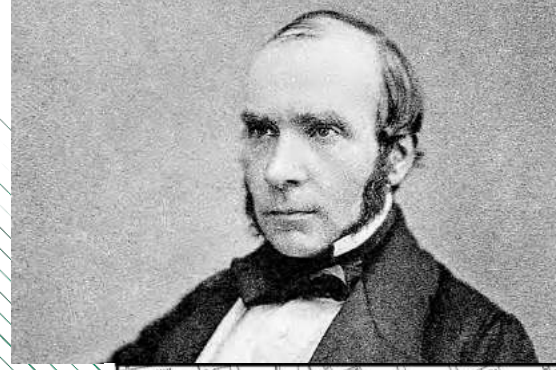
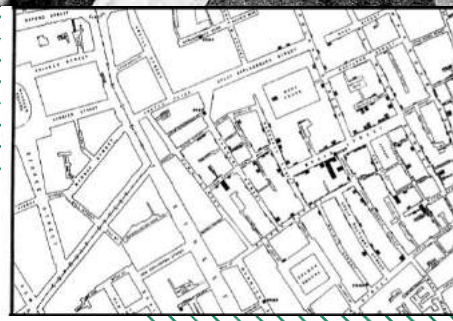
Public Health: A Very Brief History

19th Century Europe





Biomedicine

- **1898**: Liverpool School of Tropical Medicine
- **1899**: London School of Hygiene and Tropical Medicine
- **1923**: Dorland's Medical Dictionary
- **1950s** → George Engel advocating for the social, psychological and behavioural aspects of health

Public Health

- Late 19th C. Europe, post-industrial revolution
- Urbanization, industrial production, increasing population density
- Food and water-borne Disease, other infectious diseases
- Focus on sanitation, food/water safety, development of vaccines and antibiotics, expansion of epidemiology and lab sciences

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Public Health in the 20th Century (and beyond)

- Growing burden of chronic disease (CVD, cancers, diabetes, etc.)
- New emerging infectious diseases (HIV/AIDS, SARS, MERS, H1N1, COVID-19)
- Social determinants of health and *essential functions* of a public health system

(*Social Determinants of Health.* CDC, 2020: https://www.cdc.gov/socialdeterminants/)

Essential Functions of a Public Health System

- Health Promotion
- Health Protection
- Harm Prevention
- Health Assessment
- Health Surveillance

(*Promote, Protect, Prevent: Our Health Begins Here. BC's Guiding Framework for Public Health*. Government of British Columbia, 2013)

Gambling Harm and Public Health

What's the harm in gambling?

- Globally prevalent activity with deep social and cultural value
- Harms can take the form financial insecurity, employment disruption, suicide, substance abuse, psychological disorders, and more
- Gambling harms can have distributed effects
- Historically viewed as individualized problems to be treated clinically

Does this sound familiar? (i.e., Tobacco and Alcohol)

- Now considered population and public health issues
- Upstream prevention to reduce downstream harms

First Decade: 1990-2000

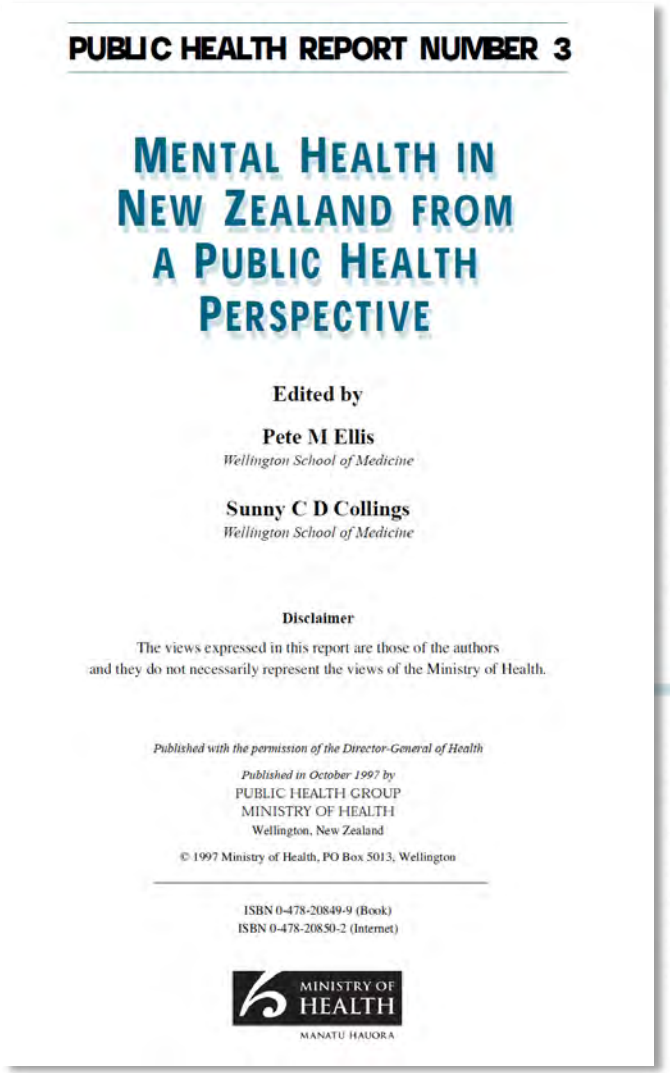
Early Initiatives

New Zealand

1990: New Zealand National Survey of Problem and Pathological Gambling

- **Key risk factors**: Gender, age, ethnicity, employment status, having a family history of gambling, frequent engagement in continuous forms of gambling

1997: New Zealand Ministry of Health report on population mental health with chapter on problem gambling



PUBLIC HEALTH REPORT NUMBER 3

MENTAL HEALTH IN NEW ZEALAND FROM A PUBLIC HEALTH PERSPECTIVE

Edited by

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Published with the permission of the Director-General of Health

Published in October 1997 by
PUBLIC HEALTH GROUP
MINISTRY OF HEALTH
Wellington, New Zealand

ISBN 0-478-20849-9 (Book)
ISBN 0-478-20850-2 (Internet)

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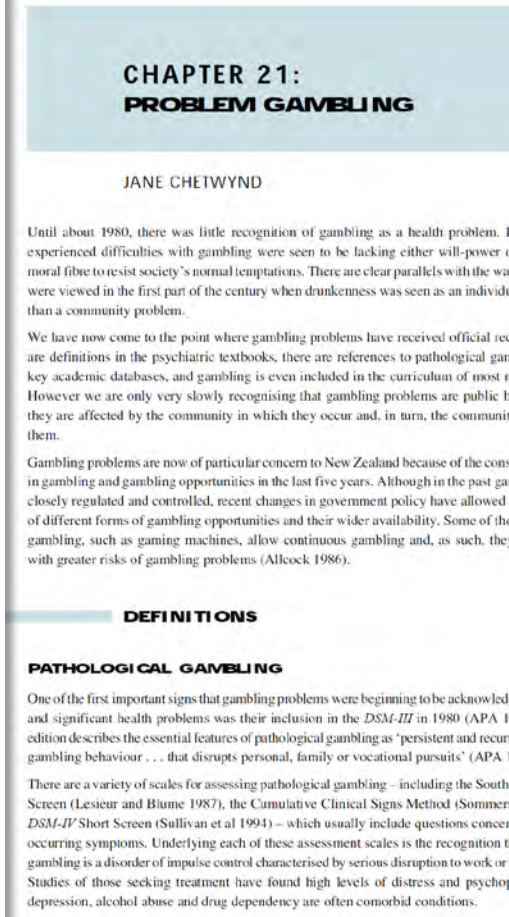
MANATU HAUORA



CHAPTER 21:
PROBLEM GAMBLING

JANE CHETWYND

Until about 1980, there was little recognition of gambling as a health problem. I
experienced difficulties with gambling were seen to be lacking either will-power
moral fibre to resist society's normal temptations. There are clear parallels with the wa
were viewed in the first part of the century when drunkenness was seen as an individ
than a community problem.

We have now come to the point where gambling problems have received official rec
are definitions in the psychiatric textbooks, there are references to pathological gam
key academic databases, and gambling is even included in the curriculum of most
However we are only very slowly recognising that gambling problems are public h
they are affected by the community in which they occur and, in turn, the communit
them.

Gambling problems are now of particular concern to New Zealand because of the cons
in gambling and gambling opportunities in the last five years. Although in the past ga
closely regulated and controlled, recent changes in government policy have allowed
of different forms of gambling opportunities and their wider availability. Some of th
gambling, such as gaming machines, allow continuous gambling and, as such, the
with greater risks of gambling problems (Allcock 1986).

DEFINITIONS

PATHOLOGICAL GAMBLING

One of the first important signs that gambling problems were beginning to be acknowled
and significant health problems was their inclusion in the *DSM-III* in 1980 (APA
edition describes the essential features of pathological gambling as 'persistent and recur
gambling behaviour . . . that disrupts personal, family or vocational pursuits' (APA

There are a variety of scales for assessing pathological gambling – including the South
Screen (Lesieur and Blume 1987), the Cumulative Clinical Signs Method (Sommer
DSM-IV Short Screen (Sullivan et al 1994) – which usually include questions concer
occurring symptoms. Underlying each of these assessment scales is the recognition t
gambling is a disorder of impulse control characterised by serious disruption to work or
Studies of those seeking treatment have found high levels of distress and psycho
depression, alcohol abuse and drug dependency are often comorbid conditions.

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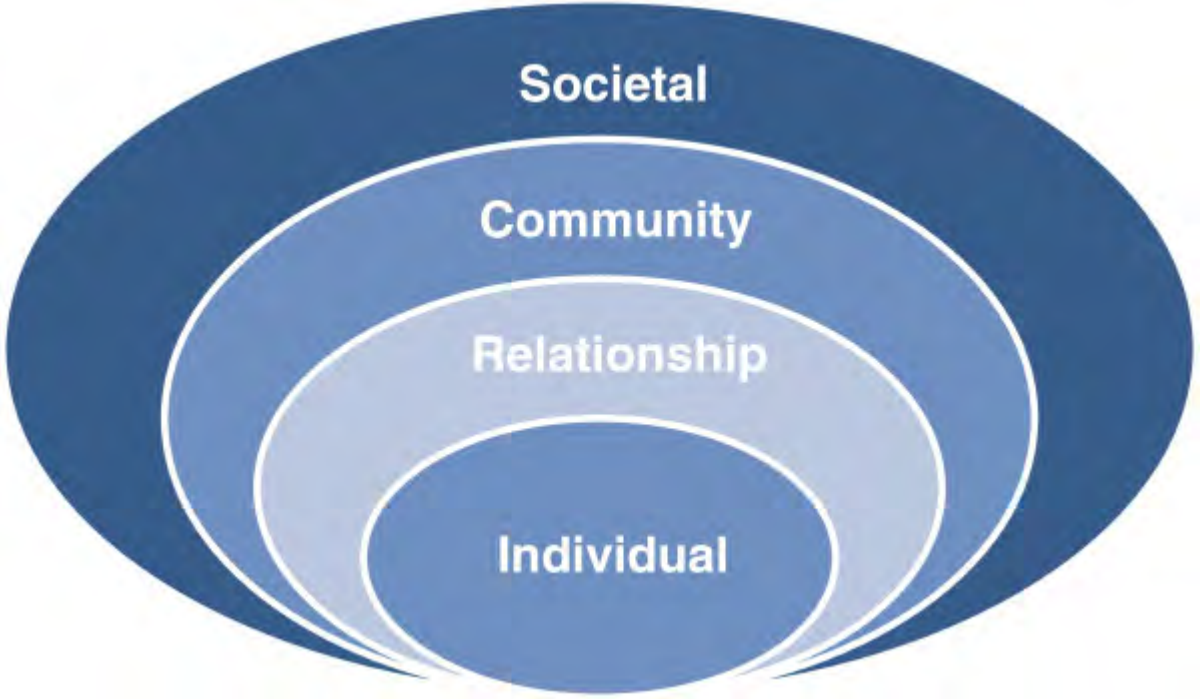
Australia

1991: First Australian survey of gambling-related problems using measures from the 1990 NZ survey

- **Key risk factors**: Personal and interpersonal distress, employment disruption, and financial and legal issues

Emerging PH perspective: A preventative approach to harms would highlight social structural factors (e.g., government and industry policy and practices, environmental factors such as game design, cultural and material factors)



(*Violence: A global public health problem. Dahlberg, L.L. & Krug, E. 2002*)

US and Canada

1994: Volberg, problem gambling epidemiologist, raises concerns over the unequal distribution of harm among women, children, and minorities

1998: Crockford and el-Guebaly comprehensively review psychiatric comorbidity studies and find high co-occurrence with substance use, personality and mood disorders.

1999: *Gambling and the Health of the Public.* Korn and Shaffer examine last decade of research and link to WHO Ottawa Charter for Health Promotion

Second Decade: 2000-2010

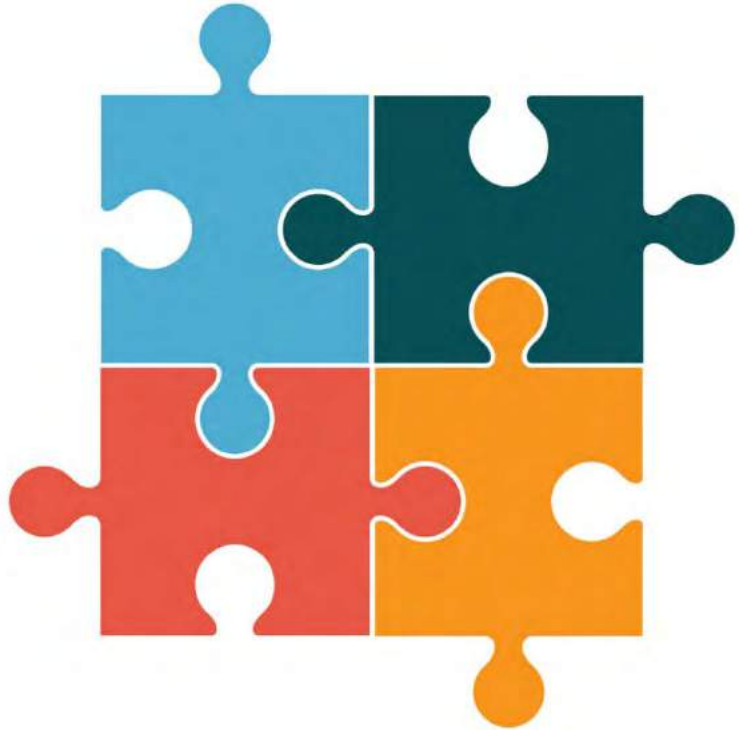
Research and Policy Advances

2000 to 2005: Moving Towards Policy

Gambling-related HARM

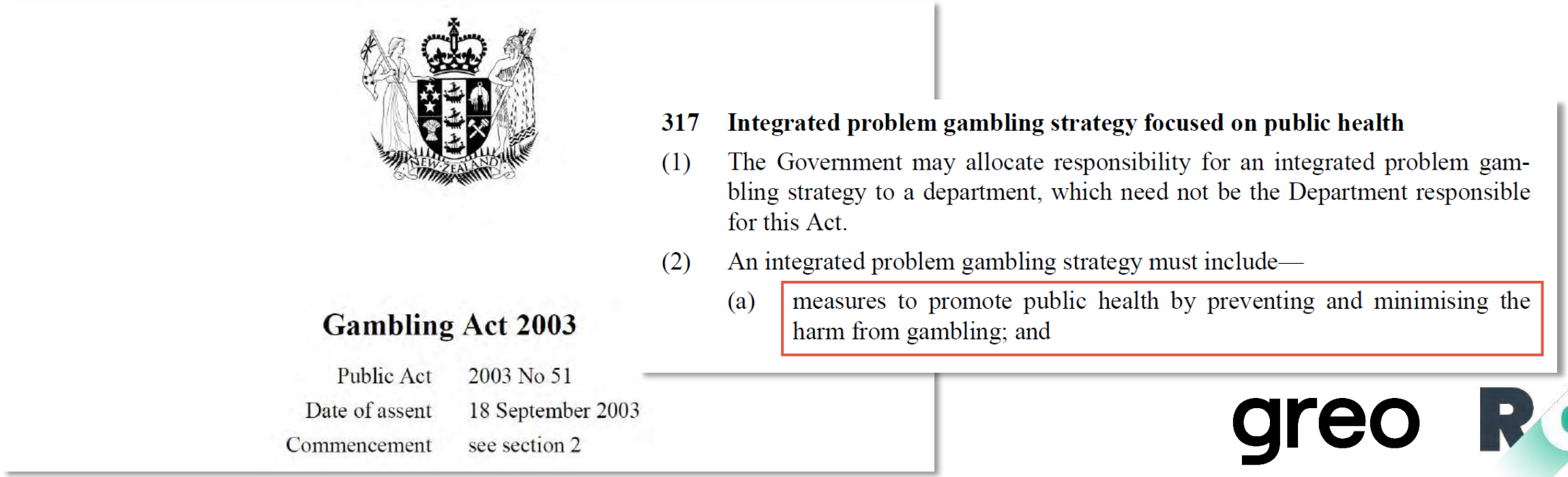
- Multiple dimensions of harm
- Not exclusive to those most severely affected
- Not exclusive to individual gamblers

All of these core elements relate well to social determinants of health and a public health approach



2000 to 2005: Moving Towards Policy

- **2001**: Problem Gambling Committee of NZ
- **2003**: NZ Gambling Act
- **2004**: Responsibility in Gambling Trust in UK
- **2005**: AUS Ministerial Council on Gambling
- **2005**: Gambling Research AUS



Gambling Act 2003

Public Act 2003 No 51
Date of assent 18 September 2003
Commencement see section 2

317 Integrated problem gambling strategy focused on public health

(1) The Government may allocate responsibility for an integrated problem gambling strategy to a department, which need not be the Department responsible for this Act.

(2) An integrated problem gambling strategy must include—

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

Poll

Early in the second decade, in which jurisdiction was a community-based gambling and public health workplan developed to prevent and address gambling-related harm?

1. Australia
2. Great Britain
3. New Zealand
4. Canada

New Zealand! Te Ngira Gambling and Public Health workplan

- *Community-based* and *community-first* approach to addressing gambling and PH.
- Honours the bicultural nature of Māori and mainstream society, and other cultural strands that make up the country, e.g., Pacific Islanders and Asian.
- Developed a framework linked to signficant public health/health promotion models for each cultural group, from which **shared values** emerged.
- Integrated into a strengths-based framework of procedures involving multiple sectors for community health action for gambling.

Health promotion models:

1. Māori - Te Pae Mahutonga including:
   - Access to Māori values
   - Environmental protection
   - Healthy lifestyles
   - Participation in society
   - Autonomy
   - Strong leadership
2. Mainstream culture - the Ottawa Charter for Health Promotion (more on that later)

Raeburn, J. & Herd, R. (2004) *Te Ngira Gambling and Public Health: a workplan.* Epsom, Auckland and Aotearoa-New Zealand. Hāpai Te Hauora Tāpai Ltd. and the Problem Gambling Foundation of New Zealand. Available from: https://www.greo.ca/Modules/EvidenceCentre/files/Raeburn%20and%20Herd%20(2004)_Te%20Nigira%20Gambling%20and%20public%20health%20A%20workplan.pdf

2006 and Onward: Prospective Data

- **2006-2011**: Leisure, Lifestyle, Lifecycle Project (LLLP)
- **2006-2011**: Quinte Long. Study (QLS)
- **2008-2011:** Victorian Gambling Study (VGS)
- **2008-2015:** Swedish Long. Gambling Study (Swelogs)
- **2010:** Problem and Pathological Gambling Measure (PPGM)

Honourable Mentions

- **2012-2015**: NZ National Gambling Study
- **2015-Present**: Massachusetts Gambling Impact Cohort Study (MAGIC)

The goal of the MAGIC study is to uncover high-risk populations in Massachusetts and inform the development of effective and efficient prevention and treatment programming in the Commonwealth.

(*The MA Gambling Impact Cohort: Analysis Across Three Waves. Mazar et al. 2019*)

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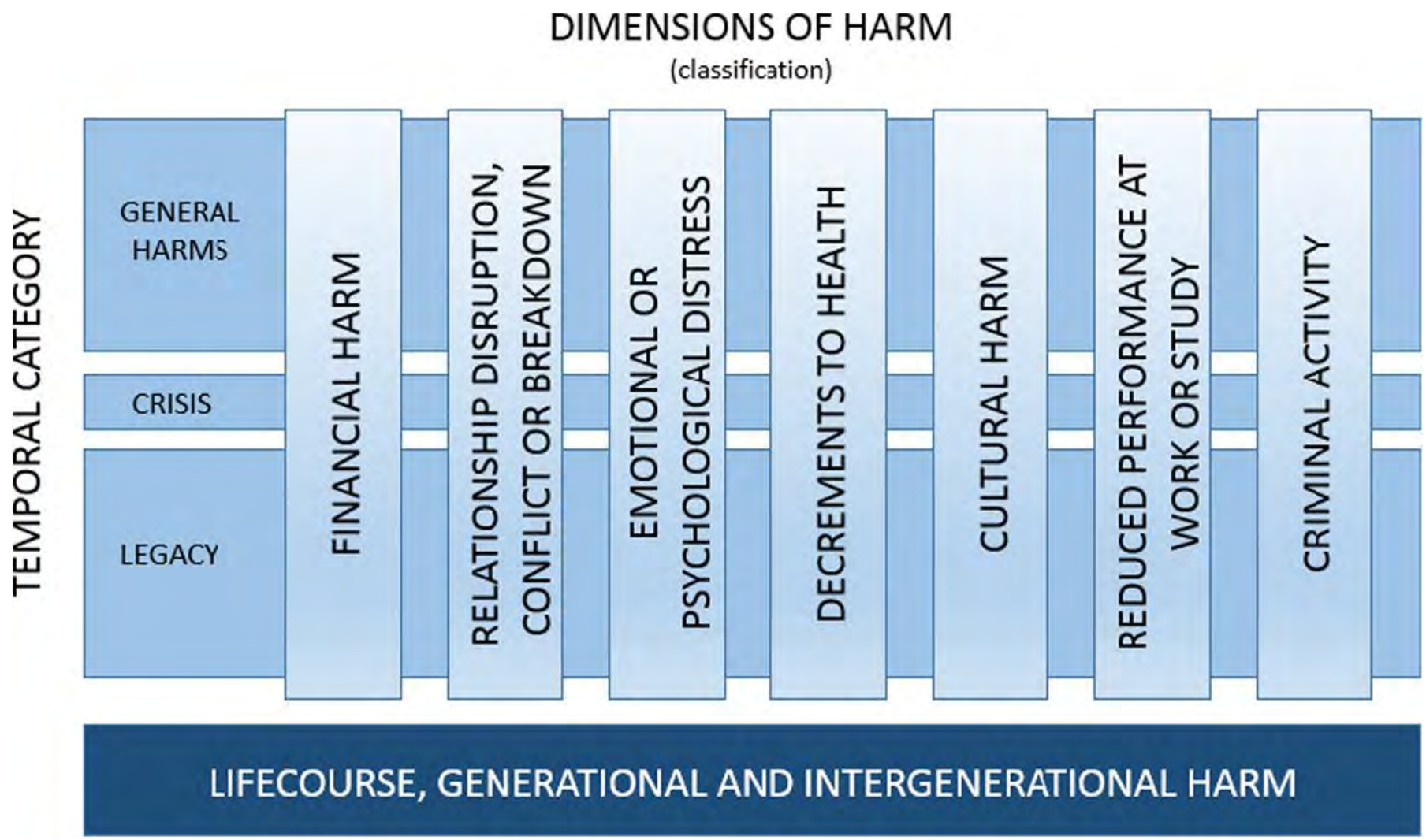
Third Decade: 2010-Present

Framework Development

Conceptual Framework of Harmful Gambling (2013, 2015, 2018)

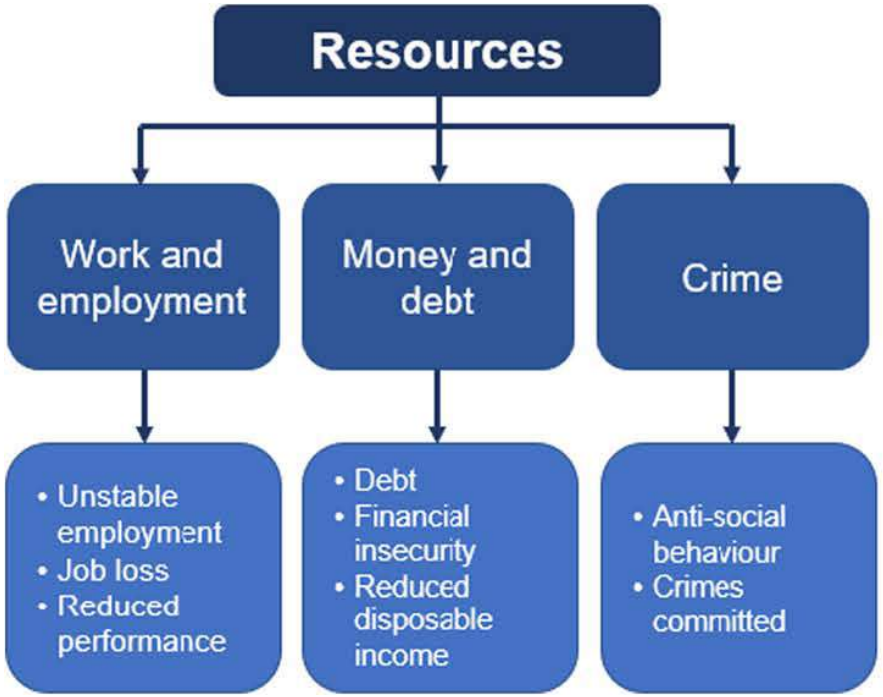
The Conceptual Framework of Harmful Gambling. Source: Abbott, M., Binde, P., Clark, L., Hodgins, D., Johnson, M. A.,Manitowabi, D., . . . Williams, R. (2018). Conceptual framework of harmful gambling: Aninternational collaboration, third edition. Retrieved from Guelph, CA: https://doi.org/10.33684/CFHG3.en, p. 6

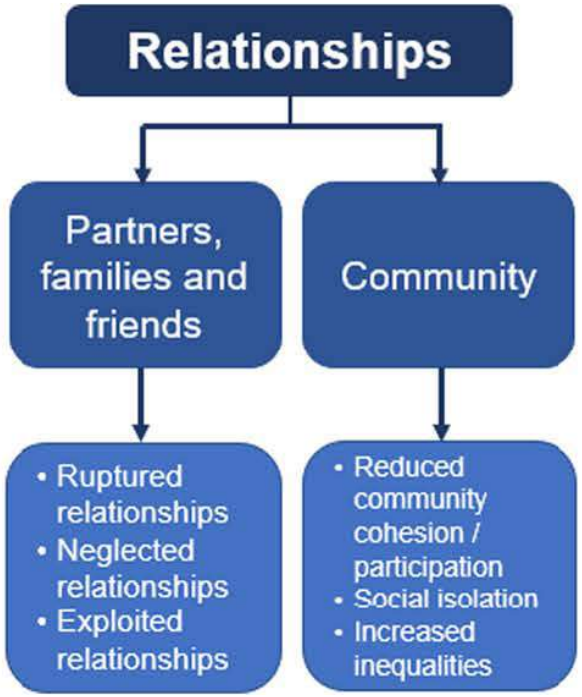
Conceptual Framework of Gambling-Related Harm (2016)

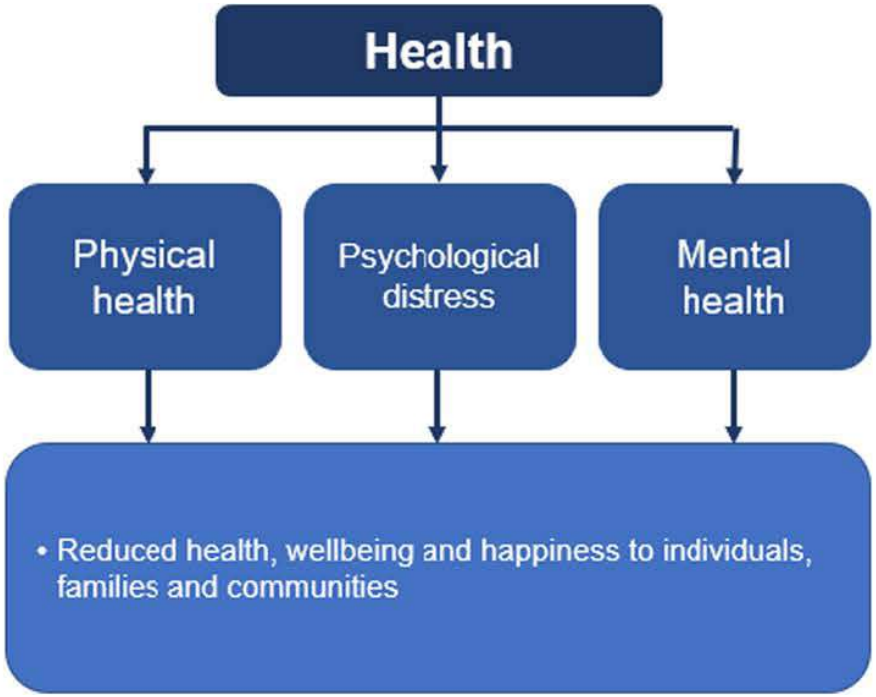


Conceptual Framework of Gambling-Related Harm. Source: Browne, M., Langham, E., Rawat, V., Greer,N., Li, E., Rose, J., . . . Goodwin, B. (2016). Assessing gambling-related harm in Victoria: A public health perspective. Retrieved from Victoria, Australia: https://www.responsiblegambling.vic.gov.au/information-and-resources/research/recent-research/assessing-gambling-relatedharm-in-victoria-a-public-healthperspective, p. 40

Measuring Gambling-Related Harm: A Framework for Action (2018)







Wardle, H., Reith, G., Best, D., McDaid, D., & Platt, S. (2018). Measuring gambling-related harms: A framework for action. Retrieved from Birmingham, UK: https://www.gamblingcommission. gov.uk/PDF/Measuring-gambling-related-harms.pdf. Adapted with permission from the UK Gambling Commission

Operationalizing the Public Health Approach

Health Promotion

- Persuade people to adopt healthy lifestyles
- Provide information and incentives
- Focuses on individual choice
- A weak policy tool on its own

Responsible Gambling:

- Address risk and harm from gambling
- Empowered through educational materials, free services and tools, and service provider training

A. Schwarzenegger, Chairman of the President's Council on Fitness, 1990-1992

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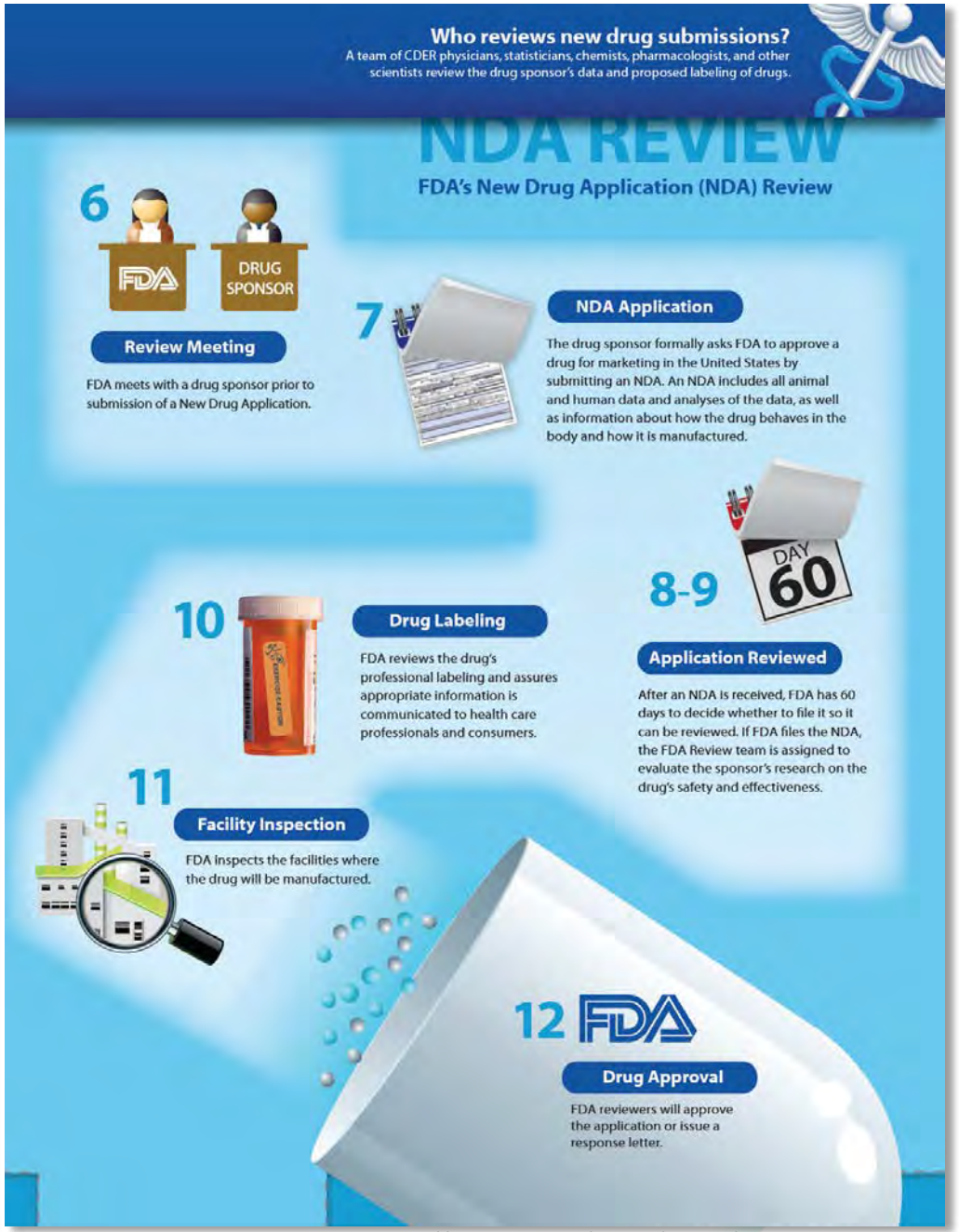
Health Protection

- Assess and control health hazards
- Emphasize broader structural tools and requirements
- Emergency management of immediate PH risks

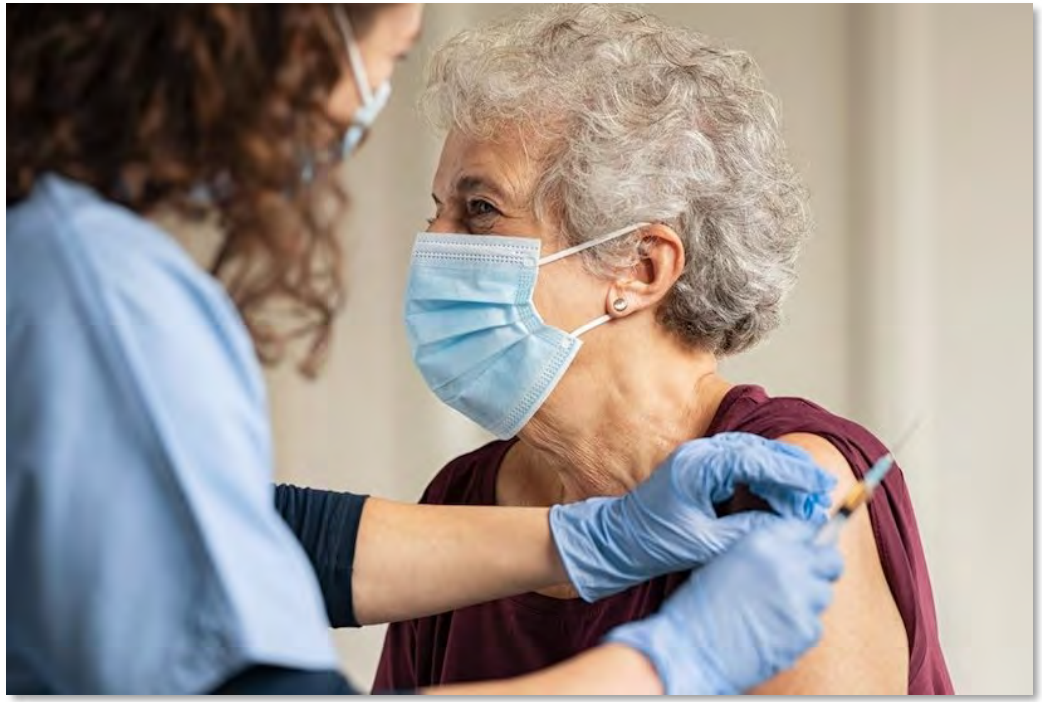
Player Protection: Age restrictions, player registration, marketing restrictions, limits on availability, review of new games, prohibition on personal credit, mandatory limits



(FDA Drug Approval Process: https://www.fda.gov/media/88742/download)

Harm Prevention and Minimization

- **Primary prevention:** before symptoms of harm manifest
- **Secondary prevention:** early symptoms of risk or harm
- **Tertiary prevention:** management and minimization of harm



(Image: City of Toronto)

Gambling Harm Prevention:

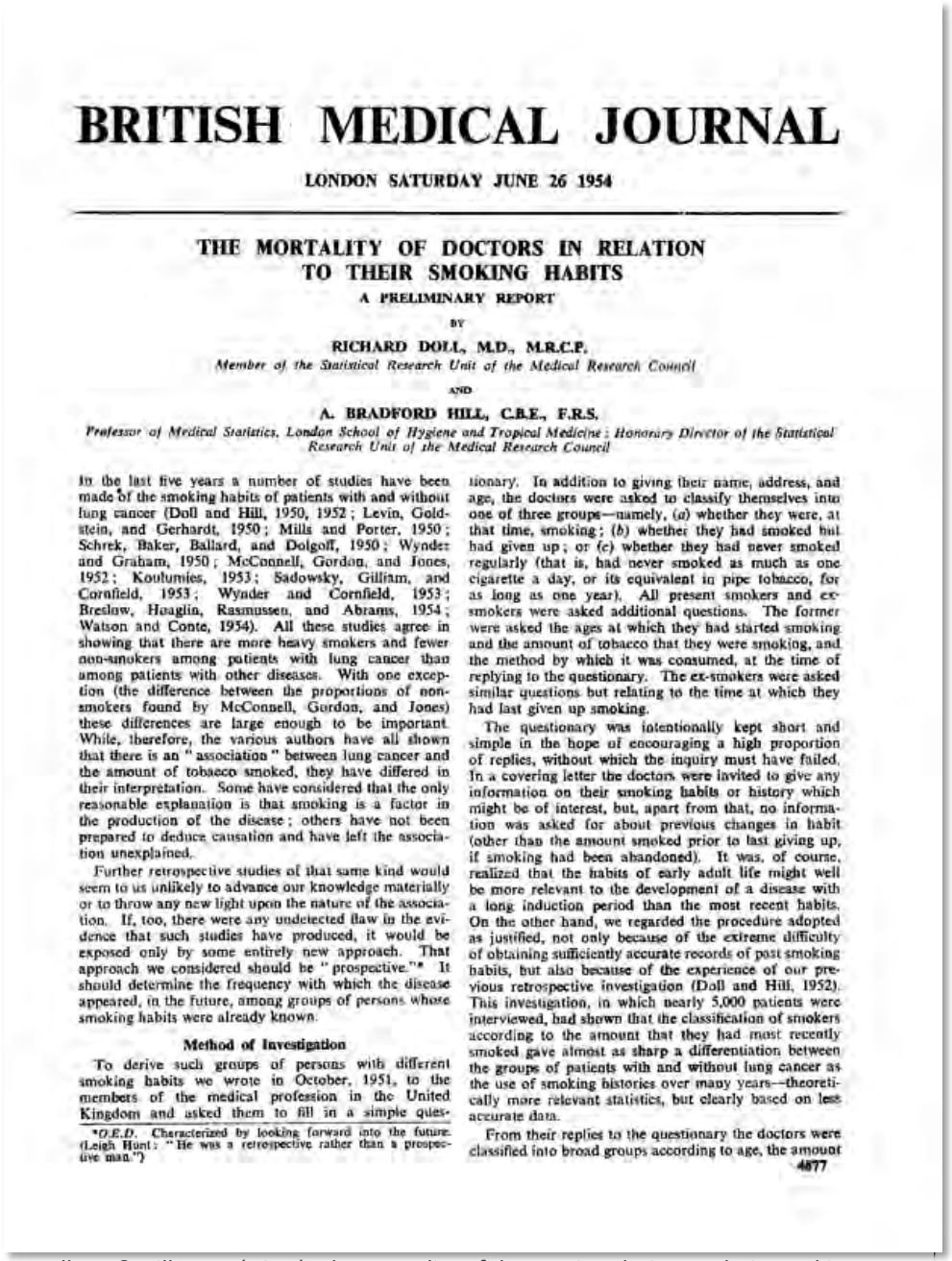
- **P1** – Student education (prevent/delay onset), limit setting
- **P2** – Screening tests, VSE
- **P3** – Counselling, financial blocks

Health Assessment

- Collection of population level health data for planning
- Inform policy and programming
- Power of prospective data collection

Impact of Gambling Health Assessment:

- NZ Gambling Act (2003)
- GRH Frameworks
- CAN Lower-Risk Gambling Guidelines



BRITISH MEDICAL JOURNAL

LONDON SATURDAY JUNE 26 1954

THE MORTALITY OF DOCTORS IN RELATION TO THEIR SMOKING HABITS

A PRELIMINARY REPORT

BY

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In the last five years a number of studies have been made of the smoking habits of patients with and without lung cancer (Doll and Hill, 1950, 1952; Levin, Goldstein, and Gerhardt, 1950; Mills and Porter, 1950; Schrek, Baker, Ballard, and Dolgoff, 1950; Wynder and Graham, 1950; McConnell, Gordon, and Jones, 1952; Koulumies, 1953; Sadowsky, Gilliam, and Cornfield, 1953; Wynder and Cornfield, 1953; Breslow, Hoaglin, Rasmussen, and Abrams, 1954; Watson and Conte, 1954). All these studies agree in showing that there are more heavy smokers and fewer non-smokers among patients with lung cancer than among patients with other diseases. With one exception (the difference between the proportions of non-smokers found by McConnell, Gordon, and Jones) these differences are large enough to be important. While, therefore, the various authors have all shown that there is an "association" between lung cancer and the amount of tobacco smoked, they have differed in their interpretation. Some have considered that the only reasonable explanation is that smoking is a factor in the production of the disease; others have not been prepared to deduce causation and have left the association unexplained.

Further retrospective studies of that same kind would seem to us unlikely to advance our knowledge materially or to throw any new light upon the nature of the association. If, too, there were any undetected flaw in the evidence that such studies have produced, it would be exposed only by some entirely new approach. That approach we considered should be "prospective."* It should determine the frequency with which the disease appeared, in the future, among groups of persons whose smoking habits were already known.

Method of Investigation

To derive such groups of persons with different smoking habits we wrote in October, 1951, to the members of the medical profession in the United Kingdom and asked them to fill in a simple questionary. In addition to giving their name, address, and age, the doctors were asked to classify themselves into one of three groups—namely, (*a*) whether they were, at that time, smoking; (*b*) whether they had smoked but had given up; or (*c*) whether they had never smoked regularly (that is, had never smoked as much as one cigarette a day, or its equivalent in pipe tobacco, for as long as one year). All present smokers and ex-smokers were asked additional questions. The former were asked the ages at which they had started smoking and the amount of tobacco that they were smoking, and the method by which it was consumed, at the time of replying to the questionary. The ex-smokers were asked similar questions but relating to the time at which they had last given up smoking.

The questionary was intentionally kept short and simple in the hope of encouraging a high proportion of replies, without which the inquiry must have failed. In a covering letter the doctors were invited to give any information on their smoking habits or history which might be of interest, but, apart from that, no information was asked for about previous changes in habit (other than the amount smoked prior to last giving up, if smoking had been abandoned). It was, of course, realized that the habits of early adult life might well be more relevant to the development of a disease with a long induction period than the most recent habits. On the other hand, we regarded the procedure adopted as justified, not only because of the extreme difficulty of obtaining sufficiently accurate records of past smoking habits, but also because of the experience of our previous retrospective investigation (Doll and Hill, 1952). This investigation, in which nearly 5,000 patients were interviewed, had shown that the classification of smokers according to the amount that they had most recently smoked gave almost as sharp a differentiation between the groups of patients with and without lung cancer as the use of smoking histories over many years—theoretically more relevant statistics, but clearly based on less accurate data.

From their replies to the questionary the doctors were classified into broad groups according to age, the amount

*O.E.D. Characterized by looking forward into the future. (Leigh Hunt: "He was a retrospective rather than a prospective man.")

4877

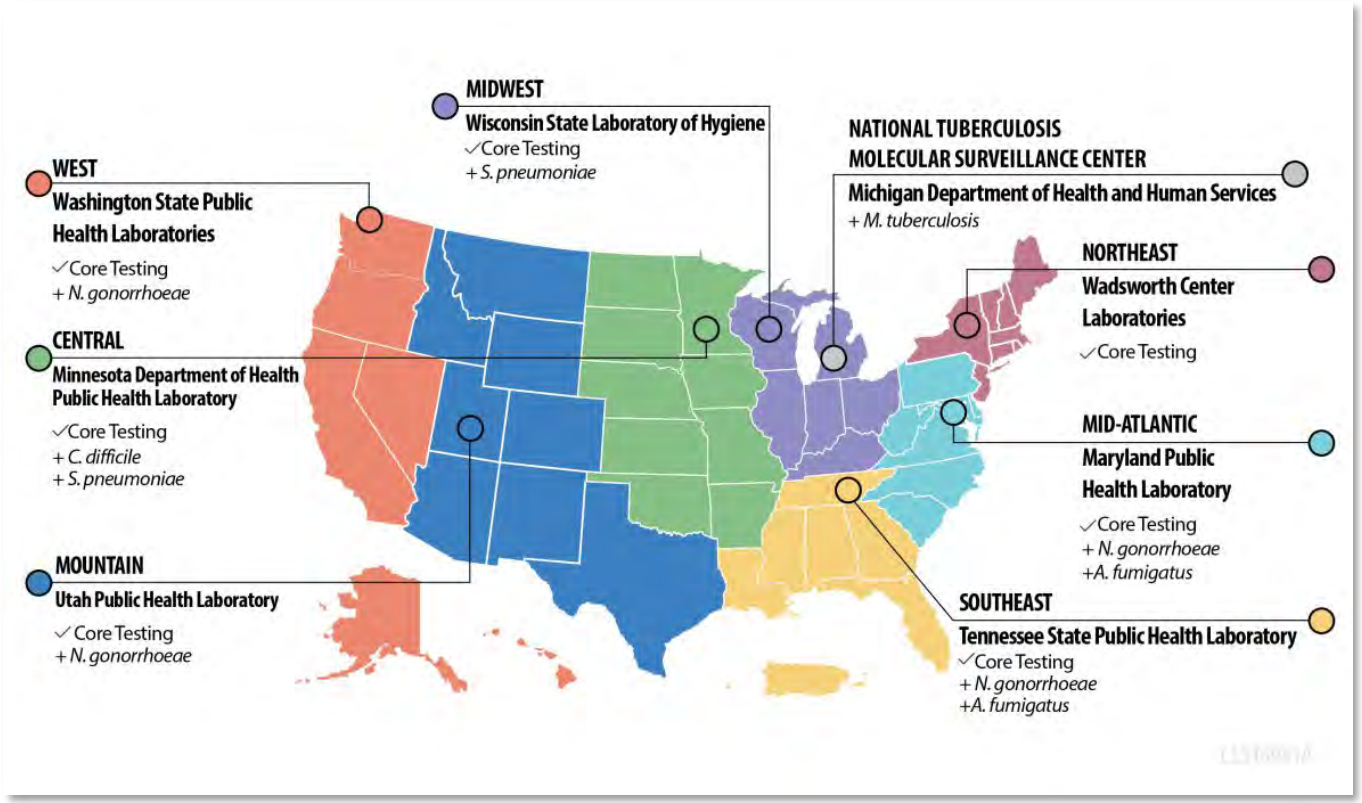
Doll, R., & Hill, A. B. (1954). The mortality of doctors in relation to their smoking habits; a preliminary report. *British medical journal*, *1*(4877), 1451–1455. https://doi.org/10.1136/bmj.1.4877.1451

Health Surveillance

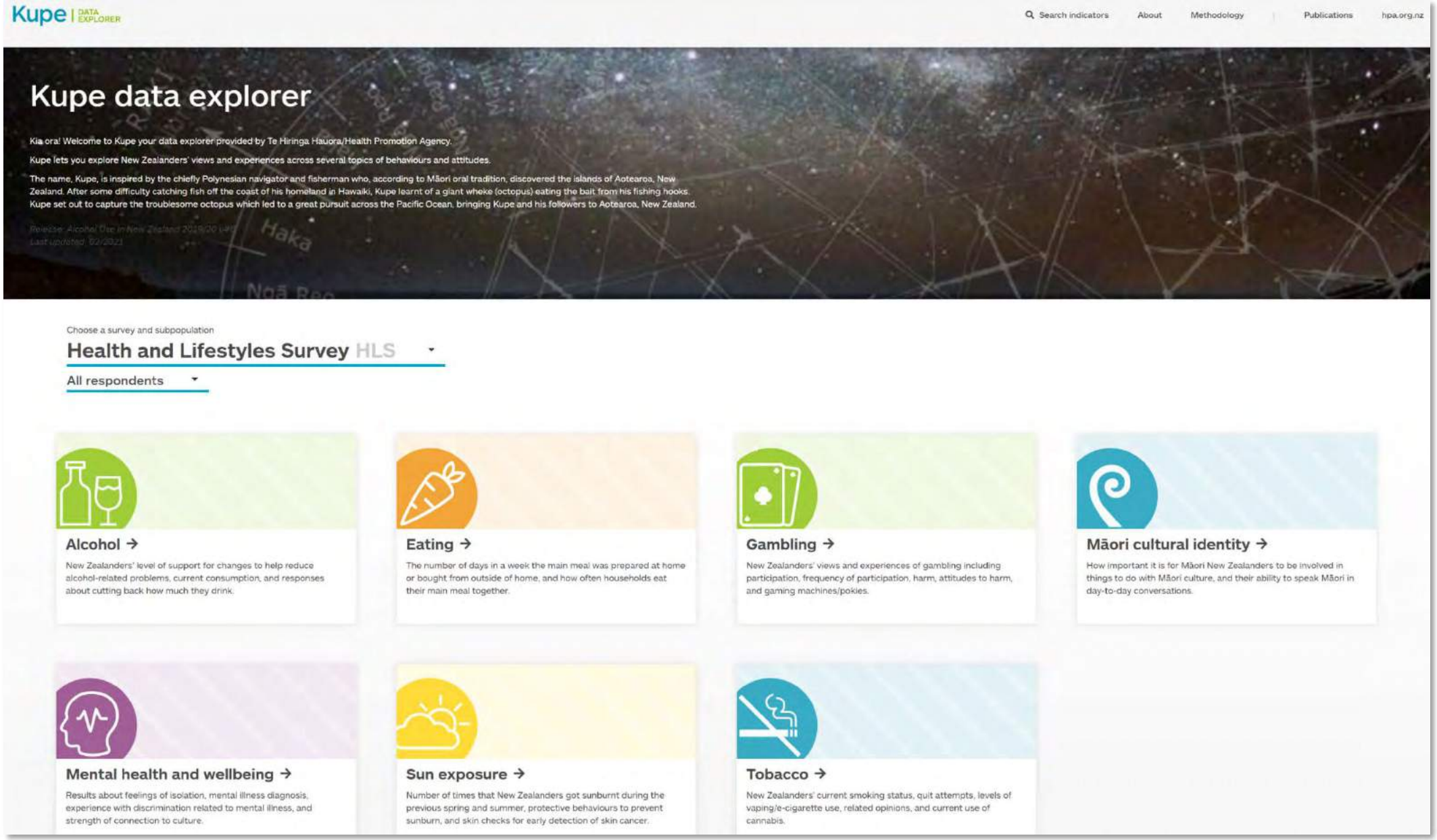
- Continuous data collection and monitoring
- Focus on rapid detection and response
- Supports health protection and emergency response

Surveillance in gambling:

- NZ Kupe data explorer
- Online operator data (potentially)



(Antibiotic Resistance Lab Network: https://www.cdc.gov/drugresistance/laboratories/AR-lab-network-testing-details.html)



(**Source: https://kupe.hpa.org.nz**)

Gaps and Opportunities

Gambling and Public Health: A Work in Progress

A lot has been achieved in 30 years

- Definitions of gambling harm
- Some prospective data collection
- Frameworks for policy and research

Balance across public health model not even

- Heavy emphasis on health promotion
- Evidence of health protection and harm prevention
- Health assessment and surveillance not extensive

Public health is still not a dominant paradigm for addressing gambling harm

Moving Forward

- Evidence is the foundation of the public health approach
- Shift in focus to upstream harm prevention
- Appreciation of distribution of harm and community health
- Collaboration and cross-sectoral partnerships

The more we know, the more we share, the more we can.

Thank You!

Questions, Comments, Keep in Touch:

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