

Dynamic simulation modelling

Supporting decisions to reduce alcohol-related harms in NSW

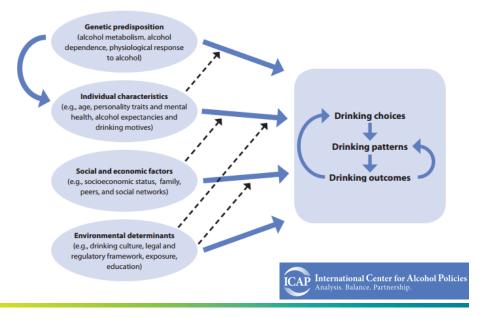
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On behalf of Alcohol Modelling Consortium and

The Australian Prevention Partnership Centre

Complex aetiology of drinking behaviour



Many intervention options

Supply reduction

- Increasing taxes
- Restricting hours of sale
- Lockouts
- Licencing controls
- Raising minimum legal age
- RSA enforcement
- Secondary supply laws

Harm reduction

- Altering the drinking environment
- Drink driving countermeasures
- Sobering up centres

Demand reduction

- Screening and brief intervention in primary health setting
- Treatment services for alcohol dependence
- Education and social marketing
- Workplace interventions
- Alcohol free events
- Advertising bans

Other important considerations:

- Contested views about the likely effectiveness of intervention combinations:
- Community advocacy for options not supported by evidence;
- Challenges inherent in introducing interventions that impose on business and industry practices.



Challenging policy environments: comprehensive approach vs. systems approach:

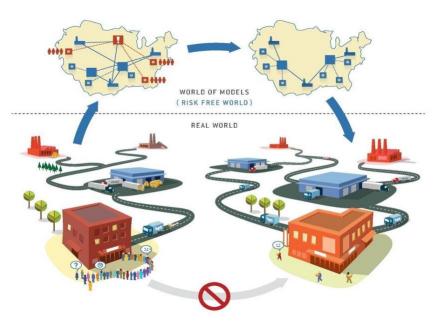
Comprehensive approach

- Aims to inclusively address identified modifiable risk factors (individual, social, environmental, health service influences).
- Cross-sectoral considerations.
- Often invest in a broad range of available responses.

Systems approach

- Encompasses holistic, crosssectoral thinking.
- Seeks to identify where best to focus action and with what intensity.
- Tools to analyze which responses are likely to have the greatest impact.
- Can help determine what can be reasonably be left out of strategies.

What is dynamic simulation modelling?

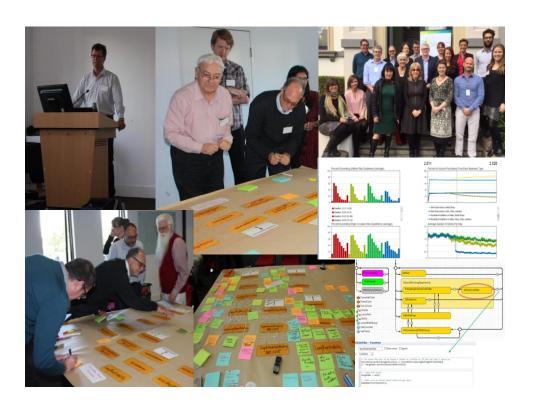


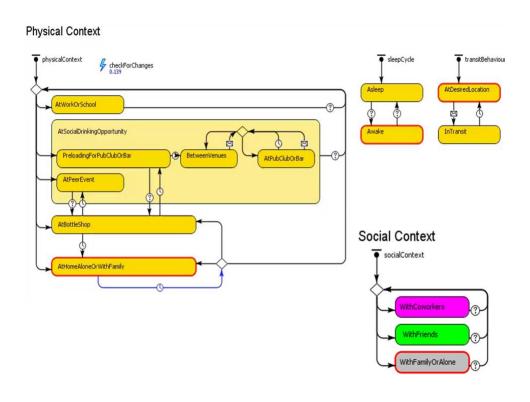
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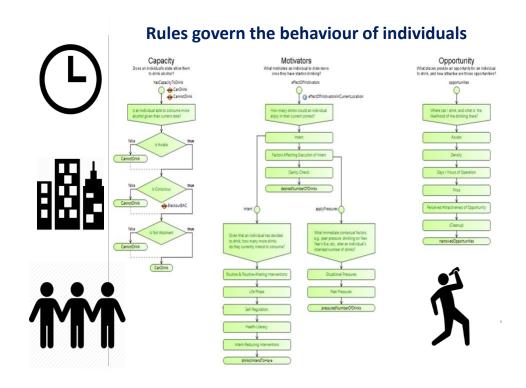
Alcohol modelling multi-disciplinary expert group

- Academic alcohol experts
- Clinical experts
- ■Policy and program experts
 - > NSW Ministry of Health
 - ➤ NSW Treasury

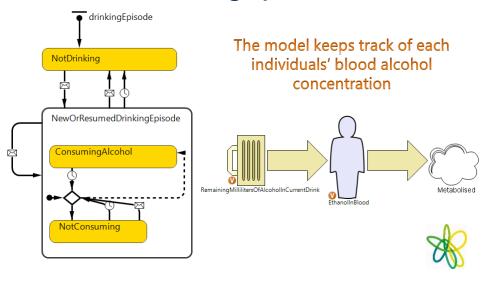








Drinking episodes

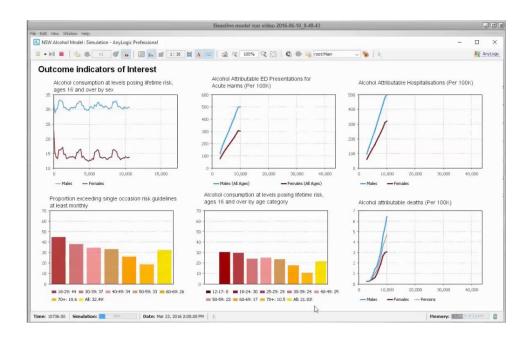


Chronic harms simulated:

Lip, oral and pharyngeal cancer Oesophageal cancer Liver cancer Breast cancer (female) Colorectal cancer Hypertensive diseases Ischaemic heart disease Haemorrhagic stroke Cirrhosis of liver

Acute harms simulated:

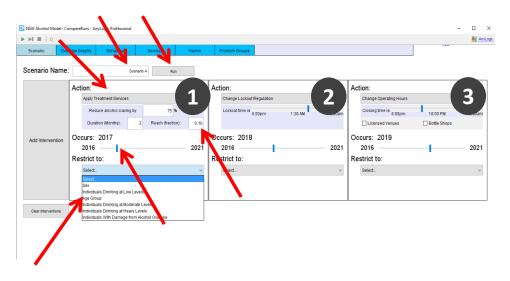
Violence	
Road traffic accidents	
Alcohol poisoning	
Accidental injuries (e.g. falls, fire, drowning)	
Acute presentations resulting from chronic alcohol use disorder	
8	1



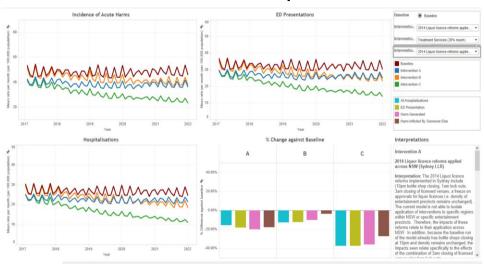
Model interventions:

Brief interventions (delivered by health professionals) Improved access to alcohol treatment services Restriction of hours of sale of alcohol 'Lock outs' Limiting the density of licensed venues Advertising bans Minimum pricing Enhanced enforcement of RSA		
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'Lock outs' Limiting the density of licensed venues Advertising bans Minimum pricing	Improved access to alcohol treatment services	
Limiting the density of licensed venues Advertising bans Minimum pricing	Restriction of hours of sale of alcohol	
Advertising bans Minimum pricing	'Lock outs'	
Minimum pricing	Limiting the density of licensed venues	
8	Advertising bans	
Enhanced enforcement of RSA	Minimum pricing	S
	Enhanced enforcement of RSA	

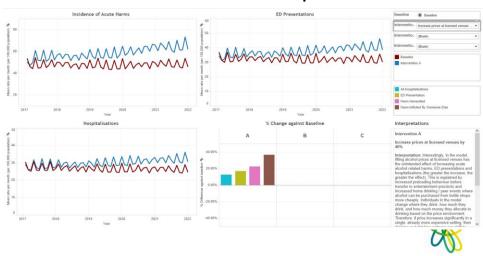
Flexible intervention interface



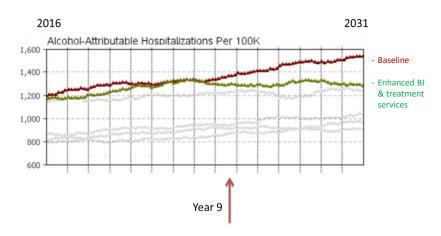
The effects of multiple interventions are not necessarily additive



Some interventions can have unintended consequences



The effect of interventions can grow stronger over time with impacts not seen within a policy cycle



The Alcohol Modelling Consortium

Name:	Position:
Professor Robin Room	Director, Centre for Alcohol Policy Research
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Professor Paul Haber	South West Sydney Drug Health Services & University of Sydney
Dr Nghi Phung	Director, Drug Health Western Sydney Local Health District & Staff Specialist, Addiction Medicine Westmead Hospital
Ralph Moore	Director, Drug & Alcohol Population & Community Programs at South Eastern Sydney Local Health District
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Professor Sally Redman	CEO, Sax Institute
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Dr Devon Indig	Senior Research Fellow, University of Sydney
Ass. Professor Sonia Wutzke	Deputy Director, The Australian Prevention Partnership Centre
Professor Andrew Wilson	Director, The Australian Prevention Partnership Centre; Director, Menzies Centre for Health Policy, University of Sydney

In summary, dynamic simulation modelling is:

- A method for combining diverse evidence sources into a 'what if' tool to test a range of policy and program options;
- A platform for engaging multi-disciplinary stakeholders and building consensus around policy and program options;
- Adds strength to business cases for investment.



Thank you

For more information contact:

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Funding partners of the Australian Prevention
Partnership Centre











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