Behavioural insights and healthier lives

VicHealth's inaugural Leading Thinkers residency

A report by David Halpern



THE BEHAVIOURAL INSIGHTS TEAM.



Lead partners

Founding partners in the inception of the Leading Thinkers Initiative.

- Behavioural Insights Team
- Department of Premier and Cabinet, Victoria
- Department of Health and Human Services, Victoria
- VicHealth

Leading Thinkers Taskforce

Established to provide guidance on key strategic matters for state policy that should frame the overall program investment and outputs.

- Alfred Health
- Arts Victoria
- Australian Ballet
- Australian Industry Group
- BehaviourWorks, Monash University
- Centre of Excellence in Intervention and Prevention Science (CEIPS)
- City of Melbourne
- Committee for Melbourne
- Eating Disorder Foundation of Victoria
- Grattan Institute
- Heart Foundation (Victoria)
- Medibank
- Melbourne School of Population and Global Health, University of Melbourne
- The George Institute for Global Health
- Victoria Police
- WorkSafe

Obesity Expert Reference Panel

Established to provide expertise and credentials to shape the focus and approach of the Citizens' Jury on Obesity.

- Baker IDI Heart and Diabetes Institute
- Cancer Council Victoria
- Department of Health and Human Services
- Diabetes Australia
- Food Alliance, Deakin University
- Heart Foundation (Victoria)
- Nutrition Australia Victorian Branch
- Obesity and Population Health, Deakin University
- Obesity Policy Coalition
- The George Institute
- The Parents Jury
- Vicsport
- Victoria Walks

Trial partners

Victorian organisations funded to conduct behavioural insights trials, with guidance from VicHealth, Dr Halpern and the Behavioural Insights Team.

- Alfred Health
- City of Melbourne
- Etihad Stadium
- Katuk
- Onesixone
- Seven
- Social Research Centre
- The Carlton
- The Savoy Tavern
- Timboon & District Healthcare Services
- Yarra Valley Water

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From the promising findings of our behavioural insights trials to the success of Victoria's first Citizens' Jury on Obesity, Dr Halpern's knowledge and guidance has propelled health promotion in Victoria into new and exciting territory."

– Jerril Rechter, Chief Executive Officer, VicHealth

CEO's foreword



Since our inception in 1987, innovation has been at the heart of VicHealth's approach to health promotion. Identifying Victoria's critical health issues and taking them on with fresh ideas has been central to our success over the last 29 years.

With the release of our Action Agenda for Health Promotion in 2013, we continued VicHealth's pioneering ways with a refreshed approach to innovation – one that explores complex health problems with cutting edge interventions and pioneering research.

With this refreshed focus on innovation, we developed Victoria's first Leading Thinkers initiative with the aim of catalysing transformational change across government, industry and community.

Our Leading Thinkers initiative was designed to connect international thought leaders with senior policymakers and key local experts, with the aim of generating and provoking new thinking, inspiring momentum, enabling change, supporting and deepening relationships across sectors and, most importantly, delivering positive results for all Victorians.

In 2013, we proudly announced Dr David Halpern, CEO of the UK-based Behavioural Insights Team (BIT), as our inaugural Leading Thinker. Throughout his residency, David's unique vision and global influence has been critical to its success, opening doors to new stakeholders and introducing behavioural insights to us and our partners as an approach to address the health and wellbeing issues facing Victoria. From the promising findings of our behavioural insights trials to the success of Victoria's first Citizens' Jury on Obesity, Dr Halpern's knowledge and guidance has propelled health promotion in Victoria into new and exciting territory.

I am delighted that the Department of Premier and Cabinet and the Department of Health and Human Services were key partners in the inception of the Leading Thinkers initiative and would like to thank them for joining VicHealth in bringing behavioural insights to Victoria.

VicHealth's Leading Thinkers initiative will continue, using Dr Halpern's legacy as the foundation to further leading innovation in health promotion to achieve our goal of one million more Victorians with better health and wellbeing by 2023.

Jerril Rechter

Chief Executive Officer

Victorian Health Promotion Foundation (VicHealth)

VicHealth statement of residence

In 2014 VicHealth developed the Leading Thinkers initiative to make international thought leadership in behavioural insights practical and accessible for Victoria. The initiative was planned as a series of multi-year residencies featuring eminent global practitioners who could spend an allocated period of time with VicHealth and mentor us, and our network of partners, in their practice.

VicHealth's first inaugural Leading Thinker was Dr David Halpern of the UK Behavioural Insights Team (BIT), supported by the Behavioural Insights Team based in New South Wales, Australia.

The objectives of Dr Halpern's residency were:

- to assist VicHealth in building knowledge and capability in behavioural insights (BI) and its application to health promotion, with a specific focus on trials targeting health behaviour change
- to make these learnings and practices accessible across the Victorian public sector and our network of government departments, industry/corporate partners and health promotion delivery partners.

Governance Framework:

Oversight and governance for the Leading Thinkers initiative was provided through a combination of mechanisms:

- Lead partners: Founding Partners in the inception of the Leading Thinkers initiative.
- **Leading Thinkers Taskforce**: Established to provide guidance on key strategic matters for state policy that should frame the overall program investment and outputs.
- **Obesity Expert Reference Panel**: Established to provide expertise and credentials to shape the focus and approach of the deliberative forum on obesity.

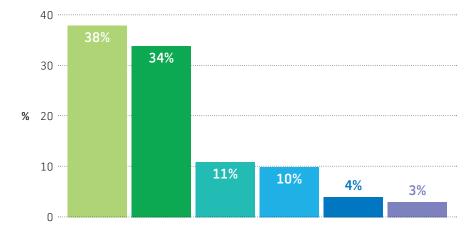
The entire list of names can be viewed on the inside cover of this report.

Building on VicHealth's long history of funding and co-creating high quality health promotion research for policy and practice, the residence provided a great opportunity for VicHealth to build its own and partners' capacity in contemporary behavioural insights methods and approaches.

Allocation of time

Figure 1: How did David Halpern and the Behavioural Insights Team spend their 100 days in Victoria?





Highlights

New knowledge about 'what works' in getting people to change their health behaviour:

Trials



Seven behavioural trials designed for delivery by VicHealth and partners (City of Melbourne, Etihad Stadium, Alfred Hospital, Timboon & District Healthcare Services and four licenced premises). Within 12–15 months, some trials have achieved significant results, and all have provided new insight into how we use human behaviour to inform policy and practice. Behavioural Insights offers a new model for understanding what works in health promotion that doesn't need to involve millions of dollars or multi-year studies. In the right circumstances this is an extremely cost efficient way to build evidence to advance public health objectives.¹



A deliberative forum - Australia's largest citizens' jury

Victoria's Citizens' Jury on Obesity had one hundred 'everyday Victorians' deliver a consensus view on the 20 recommendations, or 'asks,' that, if implemented by government, industry and civil society, would enable Victorians to eat better. This deliberation occurred over a six-week period.

A growing capability within the Victorian public sector in applying behavioural insights concepts and practices to health promotion and across government:



Workshop training

Eleven practical workshops enabled access to Behavioural Insights training for 395 public sector and non-profit professionals.²



Public lectures

Seven public lectures conducted to provide almost 900 professionals with a basic understanding of behavioural insights concepts and their potential for application in health promotion.

New collaborations and partnerships:



A community of practice

A community of practice is being launched for behavioural insights in health promotion, in collaboration with the Department of Premier and Cabinet, Victorian Department of Health and Human Services and the trial partners mentioned.



An international partnership

Between VicHealth, the What Works Centre for Wellbeing in the UK and the Department of Premier and Cabinet in Victoria focusing on mental wellbeing and resilience.

The application of behavioural insights to health promotion remains a nascent field. The Leading Thinkers initiative is designed so that each subsequent residency will extend the achievements of prior ones. VicHealth will continue to build on the outcomes of Dr Halpern's work in the next Leading Thinker residency. As such, the next Leading Thinker will allow us to expand the application of behavioural insights in health promotion. We look forward to announcing our next Leading Thinker.

¹ In 2014, the Australian Government's National Health and Medical Research Council funded research projects in health promotion and public health, which ranged in cost from \$150,000 to \$1,700,000, with an average cost of \$603,000.

² The cost of a technical training workshop delivered by organisations including VicHealth, Institute of Public Administration, and ANZSOG range between \$200-\$2000.

VicHealth can rightly claim to be a unique health institution not only in Australia, but in the world. It is fleet-of-foot, a candid friend of government but licensed to try new things, and open to looking to the challenges of tomorrow, not just yesterday."

- David Halpern, Chief Executive, Behavioural Insights Team

About Dr David Halpern:

VicHealth's Leading Thinker (2014–2016)



David Halpern is the Chief Executive of the Behavioural Insights Team (BIT).

THE
BEHAVIOURAL
INSIGHTS TEAM.

He has led the team since its inception in 2010. Prior to that, David was the founding Director of the Institute for Government and between 2001 and 2007 was the Chief Analyst at the Prime Minister's Strategy Unit in the UK. Before entering government, David held tenure at Cambridge and posts at Oxford and Harvard. He has written several books and papers on areas relating to behavioural insights and wellbeing, including Social Capital (2005), The Hidden Wealth of Nations (2010), and is co-author of the MINDSPACE report. David has recently written a book about the team entitled Inside the Nudge Unit: How Small Changes Can Make a Big Difference (2015).

In 2012, BIT became a social purpose company co-owned by the UK's Cabinet Office, the innovation charity Nesta, and its employees, enabling the team to support a wider range of public service bodies across the world. BIT has been commissioned to work with the Department of Premier and Cabinet in New South Wales (from 2012), the World Bank, the United Nations Development Programme, a number of national governments and a major program by Bloomberg Philanthropies across US cities.

GOALS OF DAVID HALPERN'S RESIDENCY

- to assist VicHealth in building knowledge and capability in behavioural insights (BI) and its application to health promotion, with a specific focus on trials targeting health behaviour change
- to make these learnings and practices accessible across the Victorian public sector and our network of government departments, industry/corporate partners and health promotion delivery partners.

David Halpern's report **Introduction**

In the policy community, Australia is often seen as a world leader in public health. This is more than marketing 'puff'. In a number of areas, notably smoking cessation, Australia can be seen as having led the world. Victoria, specifically, was early to act on advertising of tobacco in sport and arts; its punchy and emotive public health adverts are famous the world over. Most recently it has led the way on plain packaging, with other countries (including the UK) strongly influenced by the evidence and discussion that has followed. The public health interventions that Australia has pioneered were often genuinely innovative, and certainly not limited to a single policy lever such as sin-taxes or conventional regulations.

In 2010, on the other side of the world, the newly elected UK government also did something innovative: it created a team dedicated to applying more realistic models of human behaviour into the heart of policymaking. The Behavioural Insights Team, or 'Nudge Unit' as it was widely nicknamed, was not exclusively focused on public health, but this did form a major focus of its work from the outset. Indeed, its first tentative paper, published on New Year's Day in 2011 (to build on the tradition of new year resolutions) was focused on public health, exploring interventions that might encourage more walking, less smoking and better diets.

The context in the UK is worth noting. Previous Labour governments had begun to explore behavioural approaches, from an early 'thinkpiece' from Prime Minister Blair's Strategy Unit (Halpern et al. 2004) to the commissioning of the MINDSPACE report in 2009 by the Brown Government (Dolan et al. 2010). This effort was notched up dramatically by the incoming Cameron-Clegg Coalition Government in 2010. The government faced a massive budget deficit of more than 8 per cent of GDP. At the same time, its political instincts and program was strongly de-regulatory. This created a situation where the two most prominent tools of central government – spending and regulation – had been put off-limits. Policymakers were forced to think creatively about how else a government might achieve its objectives, in the words of the Coalition agreement, 'to encourage and support people to make better choices for themselves'.

Perhaps against expectation, BIT's approach seemed to work. It showed that small changes to letters could prompt tax payments, that subtle changes in what advisers said to the unemployed could get them back to work faster, and that changing the defaults on pensions could raise the savings rates of millions (and be popular).

This is really a story about how we can harness behavioural science – a better understanding of ourselves and our fellow humans – to live healthier and happier lives.

News of the results began to spread around government departments and the world, and other governments and public bodies began to come to No 10 Downing Street to ask about the approach. In 2012, two countries approached BIT and asked if we would work with them more directly. One was the government of Singapore, widely acknowledged as one of the most inventive and effective in the world. The other was Australia, or more specifically the New South Wales Government and VicHealth.

After some discussions, it was agreed that BIT would work with VicHealth on a range of issues, though with a special focus on obesity — a growing problem across the globe. Central to this, I was invited to spend time with VicHealth as a visiting 'Leading Thinker', with other members of the team, notably Rory Gallagher, Alex Gyani and Hugo Harper, also supporting the residency.

It proved a powerful learning experience for both organisations, and I hope one that will ultimately benefit both Victorians and a much wider community. Through the course of the residency, the engagement spread much more widely than the issue of obesity, including looking at the implications of behavioural insights for reducing alcohol consumption, increasing water consumption, encouraging exercise, improving mental health and reducing entrenched disadvantage. This short report gives a glimpse into what happened, how much was learnt and what the implications might be for public health and Victoria going forward.

This is really a story about how we can harness behavioural science — a better understanding of ourselves and our fellow humans — to live healthier and happier lives. But it is also a little bit of a personal story too, and I'd particularly like to thank Jerril, the staff of VicHealth and the good people of Victoria for your hospitality and engagement with this residency over the last two years. The residency enabled a much deeper engagement than is possible from reading a few papers, and I think proved to be a very effective way of enhancing and catalysing rapid knowledge transfer. I also think it worked well to have other members of the team support and work with VicHealth in the periods in between visits. This addressed a common critique of conventional 'leading thinker' style residency programs, ensuring that the energy and interest that was generated during the residency periods did not decay away in the gaps between visits, but instead that ideas were seen through and new skills nurtured and developed.

You have a wonderful state, Victoria – and you might even be able to make it better.

The following sections encapsulate David Halpern's report:

- · Changing challenges
- Behavioural insights and health
- Expanding experimentation in Victoria
- Trials in action
- BI approaches to healthier, happier lives
- Who's at the helm?
- Conclusion



"The trials undertaken during David's residency at VicHealth have shown that the simplest insights about human behaviour can be utilised to enhance people's wellbeing and – over time – even to save lives. The potential for Behavioural Insights to improve government in Victoria has only just started."

- Chris Eccles, Secretary Department of Premier & Cabinet, Victoria

Changing challenges

Public health has a rich and proud history, but many of the challenges it faces today are not the ones that its practitioners were trained to take on.

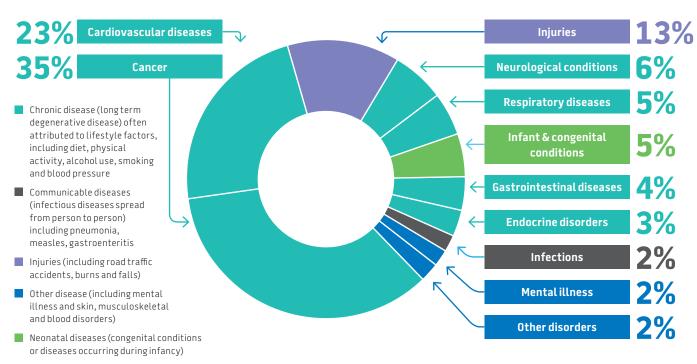
As people came together in ancient city-states, new hazards faced them. New diseases were passed from animals to humans, and existing infectious diseases spread more quickly through the larger and more crowded populations.

To combat fire hazards in the new crowded cities, the Roman and other empires introduced building regulations, such as requiring gaps between buildings, or requiring certain activities such as baking or metal-working to be conducted away from the densest residential areas. It took us millennia to gradually understand how less obvious public health hazards spread, from plague to cholera, and eventually to introduce measures to combat these hazards.

Such public health innovations, such as clean water and sanitation systems, saved the lives of countless thousands of people. These advances in health outcomes have almost always occurred well in advance of conventional 'secondary' health treatments, and even of vaccinations.

The last century has seen a decisive shift from the traditional battlegrounds of public health; in particular the focus has changed from being predominantly on communicable diseases to predominately on non-communicable or 'lifestyle' diseases. This shift away from communicable diseases has been largely driven by the use of vaccination and antibiotics, improved sanitation and living conditions and modern medical practices. The shift towards non-communicable diseases has been driven by tobacco use; diets high in excess kilojoules, sugar, salt and saturated fat; and physical inactivity. Along with an increase in mental illness, these lifestyle factors are now causing the majority of healthy years of life lost in OECD countries.





³ The 2010 National Health Survey, published in early 2015, identified the leading disease groups for the fatal burden of disease (YLL) in the Australian population.

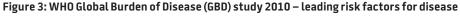
The big public health challenges of today are sometimes seen as lacking the urgency and emotional impact of those facing societies in previous centuries. Obesity, and the diseases associated with it, is sometimes referred to as an 'obesity epidemic', but it is an epidemic that is playing out in slow motion.

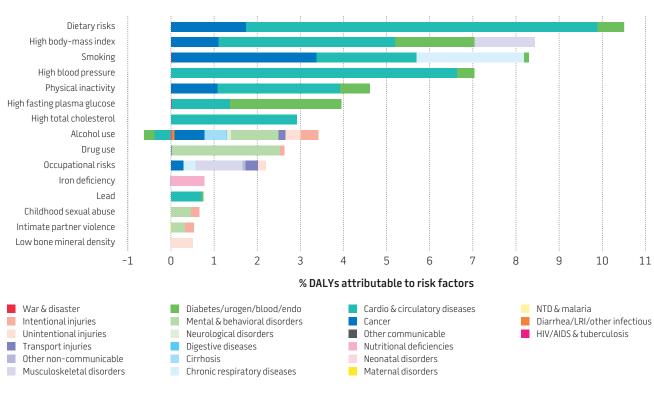
Overall, the three risk factors that account for the most disease burden in Australia are dietary risks, high body-mass index, and tobacco smoking. During the 20th century, infectious diseases were replaced by degenerative diseases, such as heart disease and cancers, as the leading causes of deaths of Australians.⁴

For some, the politics of 'lifestyle' diseases are seen as different too. Previous public health threats were seen as cruel and frightening — acts of fate that would sweep through populations, striking down the young and elderly with little they could do to resist. In contrast, contemporary public health challenges are generally seen more as the result of lifestyle choices over which individuals have more control. Smokers know that it is bad for them, and can choose to quit. The overweight know they should eat less and exercise more: it's their 'choice'.

But as we shall see, viewed through contemporary behavioural science, this distinction between fate and choice is not quite as sharp as often made out. The child born to a community with high levels of smoking and obesity did not really choose the influences that will substantially, though not completely, shape their behaviour and lifestyle 'choices'.

It is very striking that, though such lifestyle and behavioural factors today explain the majority of preventable years of healthy life lost, only a tiny fraction of health expenditure is directed at addressing such factors. Across countries, battles rage about the need to increase expenditure on extremely expensive cancer drug treatments. At the same time, it almost goes without comment that clinicians rarely 'prescribe' very cheap but highly cost-effective weight loss programs or smoking cessation programs, with rates of return 10 to 100 times higher than many late-stage drug treatments (in terms of QUALYs⁵ per \$) (Kelly et al. 2010; Jebb et al. 2011; Johns et al. 2014; Parretti et al. 2016). ⁵



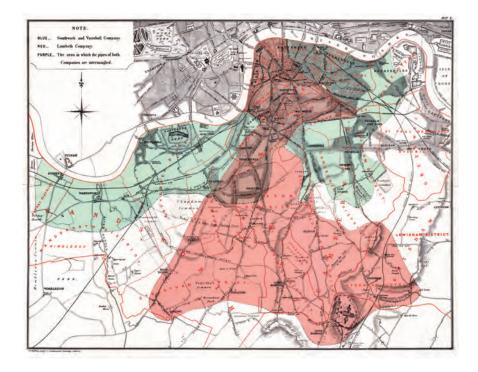


⁴ Australian Bureau of Statistics, Australian Social Trends, Mortality and Morbidity: Mortality in the 20th century.

 $^{^{5}\ \} Quality-Adjusted\ Life\ Year.\ This\ describes\ an\ improved\ year\ of\ life\ -\ the\ inverse\ of\ the\ DALY.$

⁶ The National Institute of Health and Care Excellence guidelines on obesity in the UK emphasise that behavioural interventions should be used before any other intervention. Commercial products have also been shown to be cost-effective in randomly controlled trials (Gray et al. 2000). Similarly, it is questionable whether the evidence base was established for low-cost community-based weight loss programs has made as much impact as it should have (Brownell et al. 1984).

Figure 4: In the 1850s, John Snow meticulously plotted the cases of an outbreak of cholera, showing how they were clustered around one water pump in Broad Street. Shutting the pump ended the outbreak, confirming that the source of the disease was from contaminated water, even before the exact pathogen was identified.



Potentially even more cost-effective is to intervene 'upstream' on the underlying causes of lifestyle behaviour. Just as John Snow, arguably the first epidemiologist, tracked down the cause of cholera to contaminated water, we need to track down the deeper causes of the contemporary public health challenges that we face, and test out interventions that may address these causes at source. In many cases, the most cost-effective interventions will lie outside the traditional bounds of health, or even public health. They may be in the hands of city planners, community groups, commercial players or even citizen-consumers — at least if encouraged to act. This is one of the reasons why VicHealth is a particularly interesting organisation, at least to those outside Australia, in that while its remit is clearly on health, its focus stretches well beyond the traditional confines of public health.

We should also occasionally 'zoom out', not just to look for wider causes, but also to look out for 'blind spots' – issues or causes that have a big impact but that, because our focus has traditionally been elsewhere, we neglect.

In terms of years of life saved per \$, health expenditure and effort under-emphasises public health, and lifestyle interventions in particular. But there are similar areas of strange under-emphasis within public health itself. For example, 'accidents' — particularly on roads and in homes — are a major cause of loss of healthy years of life, but attract surprisingly little attention in many countries (though Australia is one country where traffic accidents have been subject to early and sustained focus). Such 'accidents', or perhaps more accurately 'incidents', also help to explain a considerable chunk of health inequalities, especially in children. Yet it's not that there aren't potentially effective interventions. Incidents can be reduced through traffic calming and safety measures; adding window locks and stair-gates in low-income homes can reduce falls in children, and encouraging non-slip shoes can dramatically reduce falls in older people (at least in climates with icy winters, if not in sunny Australia!).

Similarly, there are some social causes that get oddly neglected. For example, there is now overwhelming evidence that social isolation and loneliness is extremely damaging to health. Indeed, one recent meta-analysis of over 140 studies concluded that social isolation had as big a negative impact on life expectancy as smoking 15 cigarettes a day (Holt-Lunstad et al. 2010). Yet while there is (rightly) a massive drive to encourage people to quit smoking by directing smokers to a range of nicotine replacement therapies and other methods to quit, the idea that medics might make similar efforts to reduce isolation tend to prompt a wry smile, or even ridicule. It's not entirely clear why that is.

It is quite possible that future researchers will conclude that the health benefits of community groups exceed those of many drugs or health care facilities, and that many of the benefits of sports and arts activities come not from the exercise per se, but from the benefits of doing sports and arts with others.



"Partnering with the Behavioural Insights Team and VicHealth has taken our health promotion innovations to a new level.

Professional advice gave us great confidence and the right balance between scientific rigour and simplicity.

We have demonstrated how small changes to our food environments lead to significant changes in the way consumers make choices about their foods and drinks. Best of all, we have managed to share our story with others and help facilitate implementation at scale.

We now see so many opportunities to apply behavioural insights principles at Alfred Health. There will be more to come from us!"

- Kirstan Corben , Lead for Population Health and Health Promotion, Alfred Health

Behavioural insights and health

Behavioural insights (BI) is the new kid on the block. Nudging, as it is sometimes known, has, over the last five years, become distinctly fashionable in governments across the world. London, Washington, Berlin – now even Canberra⁷ – have all created teams to import behavioural insights and methods.

Some in the public health community see developments in behavioural insights as stimulating major breakthroughs in relation to a range of health outcomes. To others, it's just the reworking of an old tune, given that public health has always been in the behaviour change 'game', from encouraging smoking cessation to the washing of hands. Some even see it as a dangerous development, distracting from tried and tested tools for improving public health.

The basic idea is simple enough: incorporate a more realistic model of human behaviour into our understanding and we are likely to get more effective solutions, and often at a lower cost. A century of psychology, as well as the practical results from the last decade, has taught us that humans are often quite different from the 'rational utility maximisers' built into the models of economists, political theorists and even lawyers.

Public health professionals are generally well aware of this. They know that most smokers know that smoking is bad for them, and the majority would like to quit. Similarly, there'll be hardly anyone in Australia who has not on occasion, if not on a regular basis, wished that they ate more healthily or exercised more. With this in mind, public health campaigns, particularly in Australia, have long supplemented information in public campaigns with humour and emotion, from Dumb Ways to Die⁸ to 'Snake-Eye Stevie'.⁹

The real step forward is not so much to recognise that humans are, in general, influenced by a range of influences and factors, but to build and apply this knowledge in a systematic way. The work of Kahneman and Tversky was particularly impactful not because it showed that people are 'irrational' or prone to making mistakes, but because it laid bare the specific 'mental heuristics' or shortcuts that people use to make judgements and decisions as they hurry through life with better things to do than sit with a spreadsheet and calculator a thousand times a day (Tversky & Kahneman 1974; Kahneman 2011). Armed with this knowledge, it is possible to design public health interventions and campaigns tailored to how humans actually think and make decisions, rather than how 'we think they think'. In short, it can transform the 'art' of designing public health campaigns, interventions and policy into more of a 'science'.

The No Excuse Needed campaign (see page 16) was successful in prompting behaviour change and reflection on Victoria's drinking culture: among people who saw the campaign, one-third (34%) took an action, one-third (32%) said they drank less alcohol since seeing the advertising, and one in four thought about Victoria's drinking culture in general.

Further, those who saw the campaign were more likely than people who had not seen the campaign to agree that getting drunk is unacceptable (28% vs 21%) and express concern for Victoria's drinking culture (67% vs 58%). 10

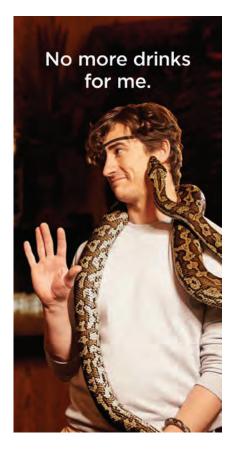
⁷ In 2015 the Australian Government created the Behavioural Economics Team of the Australian Government, or BETA, as a joint initiative of seven agencies, to be housed within the Department of Prime Minister and Cabinet.

 $^{^{8}\ \ \}text{Dumb Ways to Die is a public campaign by Metro Trains in Melbourne, Victoria, to promote rail safety.}$

⁹ The No Excuse Needed campaign, which included the 'Snake-Eye Stevie' advert, was a 2014 Victorian government-funded campaign aimed to empower young Victorians to make responsible decisions about their drinking.

¹⁰ It is good that the campaign was evaluated, since many are not. One issue with these types of self-report data is that we cannot be sure that the difference did not arise from other factors. For example, it could be that people who noticed the campaign were already more concerned about drinking. This is why methods such as RCTs are preferable where possible, though they can be hard to build into conventional campaigns.

Figure 5: VicHealth's No Excuse Needed campaign evaluation (2014–2015) showed that most young Victorians don't drink to get drunk. The VicHealth Snake-Eye Stevie advert played on humour and surprise to make the point that you don't need to make up an excuse to say that you've had enough to drink. As it happens, it also displays a number of features that behavioural scientists would recognise, such as rehearsing an alternative argument in advance, and seeking to disrupt a well-established 'habit loop'. The humour and surprise also helps to break through people's otherwise limited attention, in a world full of other calls upon it.











EAST IS A SIMPLE MNEMONIC OF FOUR CORE ELEMENTS. THESE ARE:

Easy: what we do is strongly influenced by hassle or ease. If it's hard to find the stairs, don't be surprised if everyone takes the lift.

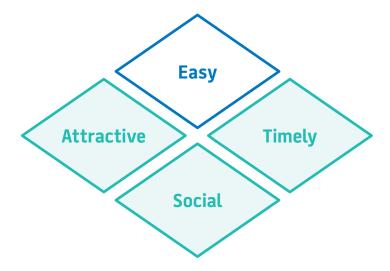
Attractive: a message or option that fails to attract our attention will have little impact, and if it does, it still needs to 'feel' like an appealing thing to do. Supermarkets can boost sales of fruit and vegetables by putting contrasting colours side by side — though they can also encourage us to fill up our trolleys with unhealthy foods by putting them at the end of aisles or by adding smiling cartoon characters to catch the attention of our children.

Social: we are strongly influenced by what everyone else is doing. A hundred thousand people bought this lifestyle book? Maybe I should buy one too.

Timely: there are certain moments, particularly when our normal behaviour has been disrupted, when we are most likely to be influenced to do something different. Encouraging people to cycle or take the bus to work instead of driving will generally yield few results, but have can have big impacts among people who have just moved house and haven't yet settled into a new routine.

Of course, humans – from the mental shortcuts in our heads, to the social influences around us – turn out to be quite complicated. Nonetheless, we can pick out a number of relatively robust effects that tend to be powerful across many situations. An important early summary of these effects was captured in a paper jointly commissioned by the UK's Institute for Government and Cabinet Office in 2009: the MINDSPACE report (Dolan et al. 2010). In the years that followed, BIT – including two of the original authors of the MINDSPACE report – developed a slightly simpler framework, called EAST. It was this EAST framework that we used in the work with VicHealth.

Figure 6: The EAST framework



There are more complicated frameworks, and many thousands of academic papers documenting and exploring the finer mental shortcuts and patterns of influence on our behaviour, but the EAST framework provides a simple and memorable starting point. It's also one that we shared with VicHealth staff and partners, and that we worked with together to think through a range of possible solutions to the health challenges faced by Victorians.

We already had a significant body of practice, and hard results, from the UK and beyond on which to build, including in health and health care. For example, we had shown that missed medical appointments could be reduced by around 25 per cent by sending patients reminder texts incorporating behavioural insights. The best performing texts included a number to call if the patient needed to move the appointment (easy), said how much the appointment cost the health service (attract), and was sent a week or two before the actual appointment (timely). Other results include:

- reducing clinical errors by making patient charts easier to fill in and read. (A similar intervention in Australia, known as Between the Flags, made it easier for clinicians to notice a potentially problematic pattern in patients' vitals and led to a significant reduction in cardiac incidents) (Hughes et al. 2014; King et al. 2014).
- improved diagnoses and patient outcomes through the use of simple checklists and decision trees in a busy Accident and Emergency Department (Ely et al. 2011; Dubosh et al. 2014; Ely & Graber 2015).
- hospital readmission rates reduced by over 30 per cent by explaining to patients, using a virtual assistant on a touch screen, how to manage their medication and condition in the days after discharge. (Stubenrauch. 2015).
- reducing over-prescription of antibiotics by informing the top 20 per cent of highest prescribing GPs their rates relative to the lower prescribing 80 per cent of GPs an effect that was sustained for at least 6 months (Hallsworth et al. 2016).

But what about public health? Table 1 summarises some examples of public health interventions from across the world that draw on elements of the EAST framework. Of course, many of these interventions in practice draw on more than one element of EAST, but we have listed them under the element that they most strongly draw on.

Table 1: Examples of behaviourally-based public health interventions, organised within the EAST framework

	Focus	Policy area	Example
Easy	Reduce friction costs	Medical adherence	Reducing barriers to adherence to tuberculosis medication by allowing physicians to verify compliance over Skype, rather than making patients attend clinics in person. ¹¹
	Increase friction (making it less easy)	Suicide	Selling pills used in suicide attempts in pop-out packaging rather than bottles reduces suicides. In general, making a means of committing suicide more difficult does not result in significant displacement to other means, so it reduces the overall rate.
	Defaults	Obesity	We are heavily influenced by cues in our 'eating environment'. One of these powerful cues is the size of the receptacle from which you eat food (for example, a plate): larger receptacles mean that we eat more, without realising (Hollands et al. 2015).
	Substitution	Reducing sodium consumption	An intervention in Peru aims to maintain behavioural patterns (adding salt to meals) but replace the salt with a low sodium substitute. Substitutes are powerful as they only require people to make one decision: to use the substitute, rather than constantly avoiding the temptation of an unhealthy food (Miranda et al. n.d.).
Attractive	Visual or spatial design	Physical activity	Adding a large artwork to the steps of Melbourne's Southern Cross station was found to increase use of the steps (relative to the escalators) by around 25 per cent in rush hour, and more than 100 per cent in off-peak hours, when the steps could be seen in all their colourful glory.
		Obesity	The Alfred Hospital, here in Melbourne, trialled placing sugary, high-kilojoule, 'red' ¹² category drinks out of sight of customers (Alfred Health 2015) as part of implementing Healthy Choices: food and drink guidelines for Victorian Public Hospitals. ¹³ The retailer was pleasantly surprised as there was no drop in sales (see page 28 for more details).
	Losses loom larger than gains	Smoking cessation	Smokers paid weekly lump sums into a bank account over six months and risked losing it if they failed a nicotine test. They were 3 percentage points more likely to quit smoking than a control group (Miranda et al. n.d.).
	'Gamification' and feedback	Diet and physical activity	Members of the Vitality Points insurance scheme (Discovery n.d.) get rewards (a free drink, discount vouchers for travel and popular goods) for undertaking health checks, buying healthy food and getting active. Participants also earn more rewards if two or more of their friends also achieve their goals.
	Incentives	Physical activity	Timboon and District Healthcare Service ran a trial with VicHealth and BIT to test whether an incentive scheme encourages people to exercise more often. We found that the incentive scheme did have a positive impact (see page 32 for more details).

 $^{^{\}rm 11}{\rm BIT}\,{\rm trial}\,{\rm currently}\,{\rm in}\,{\rm development}.$

¹² Healthy Choices: food and drink classification guide developed by the Victorian Department of Health and Human Services uses a traffic light system to categorise food and drinks as 'green', 'amber' and 'red'. Red drinks include sugar-sweetened drinks (soft drinks, iced teas and sports drinks), juices with less than 96% fruit, all juices greater than 300 mL, energy drinks, flavoured mineral waters and all milk-based drinks greater than 300 mL.

¹³ Healthy choices: Food and drink guidelines for Victorian public hospitals provides a voluntary framework for improving the availability, display and promotion of healthier foods and drinks available on hospital grounds. Although the guidelines are voluntary, all hospitals are encouraged to implement these guidelines (Victorian Government Department of Health 2010).

	Focus	Policy area	Example
Social	Visible peer behaviour	Diet and physical activity	'Blue Zones' are concentrated geographical areas whose inhabitants are significantly healthier than the surrounding areas – and most of the world. Each of the Blue Zones contain close-knit communities whose norms reinforce these ways of life (Buettner 2012).
		Water consumption	BIT and VicHealth worked with the City of Melbourne to see whether the use of public drinking water fountains and the people drinking from them could be improved by enhancing awareness and promotion. Observational studies ¹⁴ will be undertaken to measure their effectiveness (see page 38 for details).
	Social norm comparisons	Antimicrobial resistance	GPs who were the highest prescribers of antibiotics were informed that they prescribed more than their peers in a letter from England's Chief Medical Officer. The group receiving the letter saw a relative reduction in antibiotic prescribing of 3.3% over six months, amounting to 75,000 doses across 800 practices (Hallsworth et al. 2016).
	Influence behaviour	Diabetes screening in Qatar	The intervention in question asked one of the mosques to screen people at Friday prayers during Ramadan, and with the encouragement of the imams, harnessing social encouragement (and at a good time to get tested after fasting – see timely).
Timely	'Pre-suasion'15 — priming people in to look out for something in advance	Advance notification letter for bowel cancer screening	Participants were randomised to receive: a) standard invitation letter; b) advance notification, followed after one month by the standard invitation; or c) advance notification and standard reminder, plus an invitation to contact the GP to get advice about the decision to be screened. The advance notification was cost-effective and associated with a 20 per cent increase in the attendance (Senore et al. 2015).
	New ways of closing the 'hot- cold state gap'	Healthy diet	Pre-ordering increased the percentage of students who choose a healthy lunch, from 15.3% in the control group to 29.4% in the pre-order group (Hanks et al. 2013).
		Alcohol consumption	VicHealth and BIT collaborated with four venues in Melbourne to encourage patrons to drink water. The interventions focused on encouraging people to drink water at the moment when it would be most beneficial for them – when they are in a bar (see page 30 for details).
	Implementation intentions	Immunisation uptake	Prompting people to write down the date and time of a breast cancer screening appointment increased attendance by 4.5 percentage points (Milkman et al. 2011). The same technique has now been used by BreastScreen Victoria to work to increase attendance.

We used a number of elements of the EAST framework, along with VicHealth staff and partners, to develop and refine a series of interventions within Victoria. But before we turn to these examples, we first need to introduce a second key element of the residency: the introduction of experimental methods into policy and practice.

¹⁴ To be undertaken by Deakin University's Institute for Physical Activity and Nutrition Research (I-PAN).

¹⁵The term pre-suasion has been coined by Bob Cialdini to capture this class of effect (Cialdini, forthcoming).



"I would like to take this opportunity to congratulate VicHealth on the formation and implementation of Victoria's Citizens' Jury on Obesity. As a member of the Steering Committee, it is my view that this was a highly successful program that brought together a wide range of perspectives from across Victoria to address the increasing problems associated with obesity.

VicHealth's leadership in bringing together key representatives from both the private and public sectors to form the Steering Committee which in turn oversaw a thorough community engagement process ensured a diverse and robust conversation was held by citizens representing the community.

I look forward to working with VicHealth on this and other projects in the future. "

- Ben Rimmer, CEO, City of Melbourne

Expanding experimentation in Victoria

What's the best way of encouraging Victorians to drink a little more water and a little less alcohol on a night out? What's the most effective target to give people along with pedometers to encourage them to be more active? How best to design a web-based platform to encourage more people to sign up and make a lifestyle change?

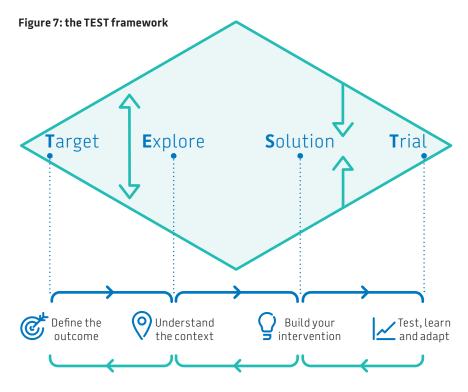
These aren't questions that one can know the answer to a priori. Using a framework such as EAST can give strong clues about what might work in general terms, but any intervention will also present a myriad of options where even the most experienced expert cannot be sure what will work best. Indeed, if the 'expert' is overly sure, the chances are that they aren't much of an expert. Empirical studies have shown that confident 'experts', with clear and simple theories, generally make less accurate predictions than experts with more complex and less certain theories (Tetlock 2005). Over-confident pundits make for good TV, but not for good predictions.

The essence of the scientific method is not knowledge, but humility. It is as much about acknowledging what you don't know, as what you do. It's about developing a hypothesis, and testing it.

Contemporary behavioural approaches have this experimental method at their core. This is certainly true of the UK's BIT, which has run more than 200 randomised control trials (RCTs) since its inception (see table 1 for more detail on RCTs). This is also true of the US government's more recently established team, and is the proposed approach of the new team in Canberra. In relation to the residency at VicHealth, a key part of the objective was to build this capability within the organisation and in its partners. As such, VicHealth opened the development sessions that we held to sister organisations in Victoria, so that others could learn from the approach too.

The TEST framework

One result of these sessions was the development and codification of another simple framework (to sit alongside EAST) that practitioners could use as part of the creative process: the 'TEST' framework (see figure 7). While EAST was developed to provide a simple, memorable guide to common influences on behaviour, the TEST framework was instead focused on the process of developing and implementing a trial.





Target

Using the TEST framework, we encouraged practitioners to start by clarifying exactly what behaviour they were trying to change – the target – and to consider from the outset what possible data might be used to measure impact or progress. In behavioural terms, this is very important. For example, are you trying to change attitudes towards unsafe sex, or do you actually want people to use a condom? And how would you be able to tell if your intervention was working, when you may not be able to observe it directly?



Explore

Secondly, we encouraged practitioners to explore: to use a range of techniques to understand the phenomenon, including ethnography and field work; to consider the relevant ideas from the behavioural literature; and to creatively explore a range of ideas that might provide the basis for possible solutions or interventions. These techniques include those developed in the design to encourage students and practitioners to come up with creative and original ideas. For example, design students are sometimes encouraged to deliberately practice opening up their minds to new and alternative possibilities, such as by being given an everyday object – like a brick or a glass – and asked to come up with as many alternative uses for the object as they can in a short period of time. Try it for yourself. How many uses for a brick can you come up with in a minute? In short, the explore phase is all about nurturing a wide range of prospective intervention ideas, even if some of them seem a little crazy.



Solutions

The third phase is to narrow some of these ideas down – developing and honing solutions - sometimes combining them or sometimes dropping them entirely as impractical or unacceptable. This may well include the use of 'prototyping', where an idea is worked up in considerable detail, and perhaps even tried in the field to see if it seems to work. This can often flush out important practical issues. For example, one of the ideas in the VicHealth Water in Licensed Premises trial, to encourage Victorians to drink more water in bars, was to get bar staff to ask customers if they would like water, too, whenever they ordered a drink. But it soon became clear that on a busy night, and with customers that were not used to the question, this could cause delay to staff, who deservedly felt that serving their patrons was their first priority; confusion to patrons, who wondered why they were receiving this extra drink; or a possible confrontation between staff and patrons. This is not unusual. We have often found during this prototyping phase that unexpected issues get flushed out, ranging from the seemingly trivial but highly impactful (for example: job centre advisers becoming annoyed with the time taken to open plastic folders of papers) to the brutal impracticality of a seemingly simple idea (for example: a department's IT turns out to be unable to do what you, and they, thought it could). It is much better to iron out these details at this stage than to prematurely begin a trial or larger intervention only to later discover the problem.

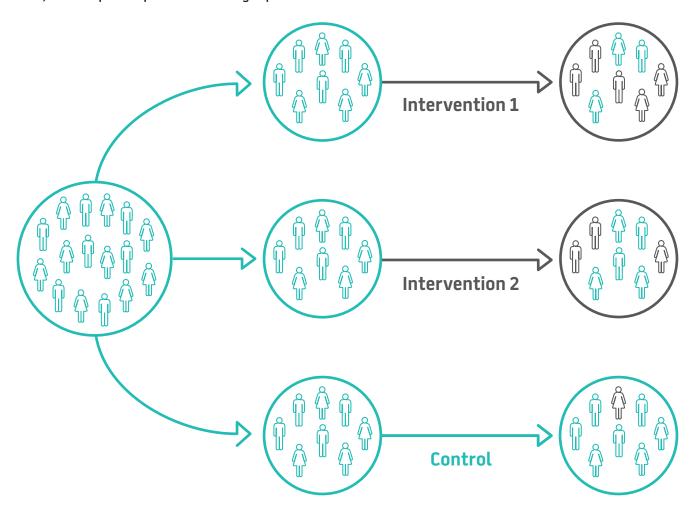


Trial

Creative and exploratory techniques can lead to great new ideas, but on their own they have a deep weakness: how do you know if they actually work? This brings us to the final phase: conducting a trial. In short, to find out if our idea really works, we need to turn to the techniques of science: systematically testing, learning and adapting (Haynes et al. 2012). At the heart of this approach lies the experiment, or, more formally, the 'randomised control trial' or RCT.

The idea is simple enough. We will only know with confidence if an intervention or variation is effective if we make the change, measure its impact, and compare it with a group and process, identical in every way except for the new element we have introduced. Similarly, if we are not sure which of a variety of messages or approaches might be more effective, we need to test each of them on an otherwise similar or matched population and measure the difference in impact of each variation.

Figure 8: Illustration of a 'Randomised Control Trial (RCT)'. People are assigned to different interventions or 'treatments' on a random basis, and the impact compared with a similar group who do not receive that intervention



We will only know with confidence if an intervention or variation is effective if we make the change, measure its impact, and compare it with a group and process identical in every way except for the new element we have introduced.

Bringing the framework to life

A key point of the TEST framework — built into the name itself — is to encourage practitioners and policymakers to think about the idea of empirical testing right from the very start of the design and development process. Far too often, policymakers ask for an evaluation at the end of the process, or even after the intervention or policy has been 'rolled out'. Often such evaluations are both expensive and near worthless. But if the intervention is designed from the outset with evaluation in mind, it can provide powerful and precise estimates of whether it worked; at what marginal cost results were delivered; and clear indications about how the intervention might be adjusted to improve its impact further (especially if multiple variations were trialled).

Another key point is to understand that trialling, and the dynamic of TEST, should never end. Organisations such as Google and Amazon illustrate the power of deeply incorporating experimentation into their core business models. Their platforms are continually testing variations, in effect conducting thousands of experiments every week. The position and sizes of images on the page, the number of clicks required, even the price paid – all will be systematically varied to see which works best, if not for the customer, then certainly for the bottom line. Government and public service organisations need to learn to be more like this too, but with social impacts in mind.

For example, BIT were asked by Public Health England to help update their website to help smokers to quit. We had quite a few ideas we wanted to test, from having testimonials from people who had managed to quit, to simplifying the process of ordering a 'quit kit'. The designers of the website had ideas too, such as having an eyecatching 'carousel' at the top of the page that would create interest. But the truth is that we couldn't be sure which details, or combinations thereof, would work best. So we tested as many variations as we could. It turned out that some details generally made it less likely that people would order a quit kit (such as the carousel), while others boosted uptake (such as testimonials). Interestingly, we were even able to show that what worked best depended on the time of day: simpler and less cluttered website designs worked significantly better in the morning!

In short, the TEST framework overlays the creative techniques of the design world onto the more formal measurement and testing methods of the behavioural science world. Not every intervention can result in a perfect RCT, but far more can than currently do. At the very least, ideas can often be tested through some form of 'pragmatic' trial design, such as a simple before—after study, that can at least give a rough sense of whether the intervention worked (see box 1).

The essence of the scientific method is not knowledge, but humility. It is as much about acknowledging what you don't know, as what you do. It's about developing a hypothesis, and testing it.

BOX 1: SOME ALTERNATIVE TRIAL DESIGNS

Before-after studies

This is perhaps the most basic design. It simply involves tracking an outcome before and after an intervention comes into force, such as a public health campaign, and testing for whether the intervention made a difference. If you have a statistician on hand, the data can be cleaned up to remove 'noise' such as seasonal variations.

However, such a design can sometimes give a false positive (or negative) due to some other change occurring over the same period. For example, if there happened to be a big sales promotion of unhealthy foods, this might swamp the impact of your campaign, though without the campaign, perhaps the surge in unhealthy foods would have been even bigger.

Randomised control trials (RCTs)

These directly address the weaknesses inherent in simple before—after, or observational studies, by introducing a 'matched control'. Since the control differs only with respect to exposure to the 'treatment', we can be much more confident that any changes that happen in this population must have resulted from the intervention alone. Actually, RCTs are really a family of designs, depending on how the randomisation is done (individual, cluster and so on) and how many 'arms' or variations are included. But the essence of the method is simple: compare those who get the intervention(s) to another otherwise similar group who didn't.

Discontinuity designs

Sometimes it's surprisingly hard to have a well-matched control group, not least because of political, practical or even ethical considerations. If a government decides to give out healthy food vouchers to the parents of disadvantaged children, many people might think it wrong to withhold the vouchers from a randomly selected group of those parents. On the other hand, it's quite likely that the government might decide that it doesn't have the money to give the vouchers to every parent in Victoria, and will have to 'draw the line somewhere', such as deciding to give the vouchers to the most disadvantaged 10 per cent. This creates an opportunity for a 'discontinuity design'. In essence, we can compare what happens to the kids whose parents were in the range of say 9 to 10 per cent poorest (who just qualified for vouchers) with those in the 10 to 11 per cent poorest range (who just missed out). They aren't exactly the same, but they are very close, and give us something very close to an RCT.

Step-wedge designs

Very often, even when governments decide they want to 'roll out' a program to everyone, it's too difficult to implement everywhere at once. This creates the opportunity for a 'step-wedge' design. Imagine that a government decides that it is going to upgrade the play equipment in schools to encourage more exercise. Even if they commission several contractors, it could take a couple of years to get around to all the schools. The normal temptation will be to start with the schools that most need new play equipment. But a good alternative would be to randomly select the order that the new schools get the play equipment (at least within a priority list of who is most versus least in urgent need). We can then compare the levels of exercise or body weight in the schools before they got the equipment, with those afterwards. This sounds a bit like a before—after study, but since the changes occur in 'steps' over a couple of years, the data from schools that have yet to have the change acts as a form of control (the 'wedge') for those that have.

There's one last detail that people sometimes forget, or underappreciate, about why it's worth doing trials with good methods. It's not just that trials tell you what worked (and, very importantly, what didn't). It's also that they enable you to tell everyone else what happened in an authoritative way. The trial result moves from anecdote or plausible idea into the realm of convincing evidence.

There's no doubt that using the TEST method, and designing and conducting an intervention in the form of a trial, will often take extra effort. Sometimes the idea will not pan out, and the trial will show a 'null result', or even that the intervention backfired and made things worse. But even a 'null result' is not a failure: imagine if you'd not run a trial and instead leapt straight to imposing the policy at the state or national level, never knowing that you were spending all that money and effort for no effect. When you do get a positive result, in contrast, it enables you to share this result with others, and to spread better practice to improve the lives of millions.

It is worth noting that most of the great advances in longevity in medicine over recent decades have not been the result of one-off breakthroughs in treatment, or wonder drugs, but by steady incremental improvements in dosage levels, combinations and treatment details. These have stemmed substantially from the hard work of tens of thousands of clinicians and researchers using trial-based methods. Imagine if we did the same with public health at the same scale, and with the promotion of better lifestyles in general. It is an exciting prospect, and one that we should embrace.

"

Our Health and Wellbeing Program (LifeMAP) had been running for some time when we teamed up with BIT and VicHealth to introduce the incentive trial. Most participants embraced the challenge of the higher targets (especially those already active) and found it fun, although challenging.

A number of the teams became quite competitive and supported each other to increase their steps. During the trial period, BIT and VicHealth were a delight to work with, and I would like to thank them for their support of the program."

– Tania Leishman, Timboon & District Healthcare Service



Trials in action



- 1. Nudging healthier beverage consumption in retail settings:Alfred Health p28
- 2. Encouraging water consumption in licensed premises: VicHealth's Alcohol Team p30
- 3. Incentives for physical activity participation Alternatives to '10,000 steps per day': Timboon and District Healthcare Services p32
- 4. Testing the most effective messaging to increase campaign sign-up: VicHealth's H30
 Challenge trial p3
- 5. Tailored messaging to increase survey participation: VicHealth Indicators Survey p36
- 6. Urban design solutions to encourage water consumption:
 City of Melbourne p38
- 7. Increasing water consumption in sports settings and stadiums:

 Etihad Stadium p40

We have now introduced the two principal elements of the BI approach – content and process.

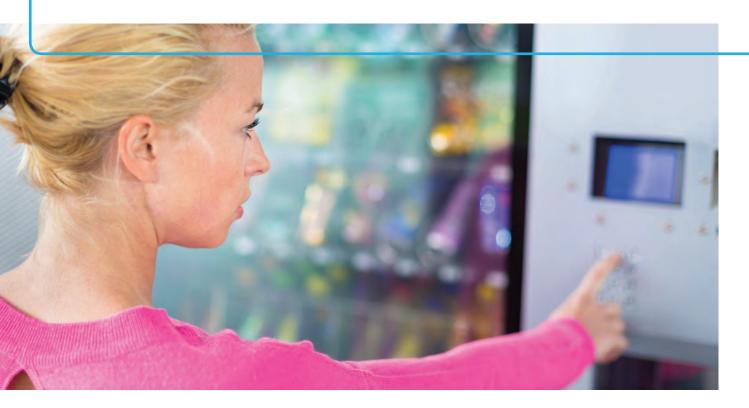
The first was the 'content': the behavioural forces and effects that practitioners need to be aware of, as summarised in the EAST framework. The second was the 'process': the particular combination of exploratory and creative approaches with the experimental method, as summarised in the TEST framework.

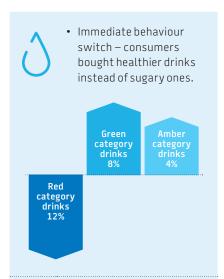
Both VicHealth and I were keen that the residency result in more than some enjoyable seminars that everyone soon forgot. Instead the idea was that VicHealth and BIT staff would work together to develop and implement a series of trials bringing the content and process of BI approaches to life, and leaving a legacy of skills and practices that would survive and flourish long past the end of the residency. In some cases, such as with Alfred Health, the trials allowed VicHealth to work with organisations who may not have been their traditional partners.

This led to a series of BI trials, and I would like again to thank the staff and partners of VicHealth for their collaboration and engagement with the program. This section summarises a selection of these trials.

Not all of them 'worked', in the sense that some ideas that were tested proved not to do any better than the control. But that's not a failure. That's learning.

TRIALS IN ACTION







- No economic impact to retailers: profitability maintained.
- Shifting placement of product had 'zero cost' to provider.



Simple physical and structural cues, such as changing what is within sight, are powerful levers.

1. Nudging healthier beverage consumption in retail settings: Alfred Health

In common with many hospitals, despite their health care role, the food and drink sold within The Alfred was not exactly healthy. But the leadership decided to do something about it. Under the energetic direction of Kirstan Corben, Lead for Population Health and Health Promotion at Alfred Health, researchers at Deakin University, ¹⁶ BIT and VicHealth, a series of trials were conducted within the hospital to see if relatively small changes, or nudges, could encourage staff and patients to eat more healthily.

Product Placement Trial (existing Alfred Health trial):

One of these trials involved moving the 'red' category drinks, i.e. those with a lot of added sugar, to a less prominent position in the main cafeteria. The proprietor was worried about the impact this might have on sales and profits, but, with a good working relationship with Kirstan, agreed to try it out. The results were very striking. Sales of the most unhealthy drinks fell, but overall sales were unaffected. The proportion of red drinks sold reduced by 12 per cent (green increased by 8 per cent and amber by 4 per cent thus showing a willingness to substitute all the way from red to green at twice the rate of red to amber). It was a great result, and persuasive enough to mean that the proprietor was happy to stick with the change, and indeed to try further changes.

Having the intervention tracked so clearly, including the data on sales, was about much more than The Alfred alone. It meant that the results could be shared with others, not just in the public health community, but the heads of other hospitals, retailers, and policymakers more widely. Indeed, the Alfred trial has been picked up not only in Victoria. but across Australia and in other countries too.

¹⁶ Principal researcher Anna Peeters, Professor of Epidemiology and Equity in Public Health and Head of Obesity and Population Health, School of Health and Social Development, Deakin University.



6 month trial.



 20% 'tax' on sugary drinks led to a
 5 percentage point decrease in purchase (consumers switched to non-sugary drinks).



 No significant impact on sales: revenue was maintained.



 Alfred Health was able to test the effectiveness of a 'tax' and found that it did go some way to encouraging healthy habits.

Pricing Trial (VicHealth-initiated trial):

The second major trial looked at the effects of price on drinks purchases. Behavioural approaches are not, and should not be limited to, 'nudges'. Straight financial levers can often be effective and are being used in more and more countries (the UK included). This is particularly likely when a simple price differential can lead to individuals substituting one behaviour for another. A current area of interest both within Victoria and internationally is sugar-sweetened beverages, as low-kilojoule alternatives are readily available for the majority of popular drinks. Many consumers may be agnostic between regular and diet sodas so even a small price differential could shift them between products.

Many public health bodies have called for a 20 per cent tax on sugar-sweetened beverages, and this approach was also recommended by Victoria's Citizens' Jury on Obesity (see page 47 for more details). A great deal of modelling work has tried to estimate the potential impact of such a tax, but little real-world work has been done to look at its impact in the developed world.

We wanted to test this in Victoria. We teamed up with Alfred Health to look at the impact of a 20 per cent price increase on high-kilojoule beverages, running a randomised controlled trial on the vending machines within the hospital. From August 2015 to February 2016, half of the vending machines in the hospital increased the price of these high-kilojoule, 'red' category drinks and half kept the old prices. Notably this price increase applied to all high-kilojoule drinks, including fruit juices, as these are often very high in sugar. Figure 9 shows that our intervention led to a reduction in the proportion of red drinks being purchased, thereby reducing the number of kilojoules sold via vending machines in the hospital. Importantly there was no significant decrease in overall sales. This means that we were able to reduce the kilojoule content of people's purchases without adversely impacting revenue for the supplies. This is incredibly important for potential scaling of this intervention as suppliers would be reluctant to implement anything that might reduce their profits. We believe this trial is a fantastic example of how simple field trials can give timely insights to inform current policy issues and how Victoria continues to be at the forefront of tackling global public health issues.

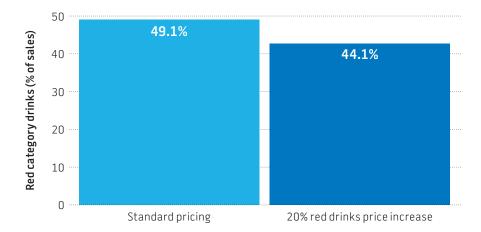


Figure 9: Proportion of red drinks sold by each vending machine

Alfred Health was able to test the effectiveness of a 'tax' and found that it did go some way to encouraging healthier habits.

TRIALS IN ACTION





• 8 week trial of 3 different interventions.



 Inconclusive results, although useful insights collected to inform further trial refinements (in progress).



 Fewer people drink water than we expected.

2. Encouraging water consumption in licensed premises: VicHealth's Alcohol Team

Trialling things in the field is a lot more complicated than simple lab experiments. You have much less control over the environment and as a result you have to be pragmatic with evaluation and not let perfectionism spoil an opportunity to learn something. We must balance the trade-offs between rigorous design with ecological validity – i.e. it's quite difficult to recreate a realistic experience of being at a bar within a research lab, especially if you're concerned with a wider subset of the population than just students. We ran a pilot trial looking at increasing the consumption of water in licensed premises.

Licensed premises in Victoria are required to serve free water to patrons on request, but we wanted to go further than the letter of the law and found four willing premises to work with us. The process of creating the interventions with a behavioural insights lens was a novel experience for VicHealth, with staff members conducting field research to see where opportunities lay for interventions, and a workshop involving industry representatives, VicHealth and a design team to co-design water interventions that would not disrupt licensed venues' business. The last point is an important one. Making sure that water is available is fundamental, but getting businesses on side to implement and actively promote drinking it is hard. You can legislate for water to be available, but you can't make punters drink it.

We tested three different interventions -1) water on the menu, 2) an 'Oasis' water cooler present on site, and water offered with each purchase between 8 pm and 1 am - as well as 3) a control.

The results relating to whether we increased water consumption were inconclusive; however they did give us some key insights about people's behaviour. These were that for every 100 people observed in a bar, only three glasses of water were seen by the researchers, and that for every 100 drinks sold, only two glasses of water were seen. We did find early indications that one or more of these interventions could influence behaviour, but this pilot trial was not large enough to definitively determine which. It also provided an excellent experience for the research team in the importance of specific outcome measures as well as adopting conservative research designs in unknown territory. A second iteration of this research commenced in February 2016 with a simplified study design to control for confounding factors and obtain clearer results. Phase two will involve collecting water consumption data at one licensed venue, include a longer baseline period and will test one micro-intervention that combines the 'Oasis' water station and promotion of free water on the menu.

VicHealth will disseminate the research results in late 2016. Research findings will contribute to the objectives of VicHealth's broader water initiative to encourage greater consumption of water by all Victorians, and will further inform policy and practice to increase access to water in licensed premises.

The interventions were co-designed with the businesses that would need to implement them. This process allowed us to understand what would be acceptable and feasible for them.

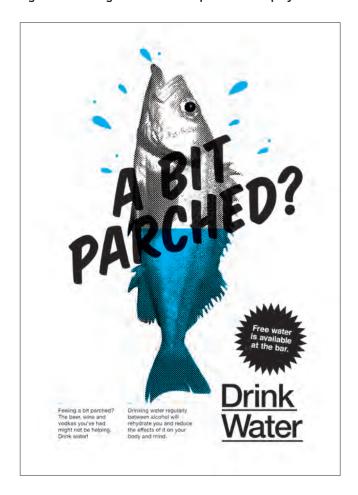


Figure 10: An image from one of the posters on display

TRIALS IN ACTION





- 5 month trial.
- Immediate behaviour change observed.



- 2144 more steps walked per week.
- Participants 44% more likely to meet exercise target.



Personalised targets
 were more effective than
 group based targets
 in increasing physical
 activity levels.

3. Incentives for physical activity participation – alternatives to '10,000 steps per day': Timboon and District Healthcare Services

Physical activity is a key driver of health and incentivising physical activity is becoming a more widespread strategy to help people reach their recommended levels. Research has found that rewards for goal attainment are more likely to have positive longer-term outcomes than simply rewarding outcomes. At the same time, wearable technology has made it much easier for us to quantify physical activity, making trialling physical activity interventions easier than it has ever been. However, it is not known whether wearables alone are the creators of behaviour change or just facilitators (Patel et al. 2015). Despite some initial promising work, there are big questions still over what types of incentives work best, and what you should incentivise.

We teamed up with Timboon and District Healthcare Service to look at what targets would motivate their staff best. We wanted to build on an already successful workplace health initiative and to leverage the power of existing social connections to improve the effectiveness of the incentives. Although the workplace health initiative had broad engagement, we could see that the number of kilojoules that people were burning in the program was slowly dropping. Group-based incentive schemes have been shown to be more effective but the effect of more personalised targets had yet to be investigated (Schneider et al. 2006; Kullgren et al. 2013). We ran two sets of analysis: a before-and-after analysis, looking at the presence or absence of incentives, and an RCT looking at the type of targets the groups were given.

Half of the eight teams received personalised targets based on their historic average daily steps +2500. The other teams were given a group average target based on the historic average of the whole group +2500 (in this case it was 13,300 steps). Fifty massage vouchers to the value of \$50 each were used as incentives. In order to receive an incentive, everyone in the group had to hit their target five out of seven days in the week. The trial was run for five months and data was collected throughout the period.

The introduction of incentives re-invigorated the workers' walking efforts. Specifically, participants walked approximately 2144 steps more per week, were more likely to reach their exercise target by 44 percentage points, increased weekly kilojoules burnt by about 644, and increased their weekly active minutes by 25.7 minutes.

In addition to this, participants in the personalised target condition were found to have 587 more weekly steps than those in the group target condition, indicating that additional personalisation of the targets was helpful for motivation. The incentive scheme was found to have a significant effect for all but the most physically active 17 with the personalised target having a significant impact for those in the middle two quartiles. We also collected quotes from the participants which highlight just how empowering those targets could be.

"From a personal perspective, the fact that I had a goal to meet each day motivated me! But more so giving me the confidence that 'I CAN!' You can do anything with a bit of motivation and encouragement. From a team view, you do it because you are a team. However encouragement is what makes the whole team work. The satisfaction of seeing people reach their goals and incentives is priceless."

"The incentive scheme trial has given me the motivation to be active every day. Talking to other staff about reaching their goals has also been a motivation."

This quote is from the Health Promotion Officer implementing the program:

"I found at the beginning of the trial there was some backlash from participants that found it hard to reach their goals. It was almost as if something had been taken away from them. Therefore, the incentives were actually a disincentive. It wasn't until I explained to them that they really didn't have to change anything they were doing if they didn't want to, just continue as normal and nothing would change. Some participants saw their target as unachievable and didn't even attempt to reach it, but for others it was a real challenge and they still continue to reach the 'higher' target every day."

Opportunistic trials can be an excellent way to gain great insight with relatively little effort. Timboon intended to implement an incentive scheme anyway and some slight tweaks to delivery, combined with additional analytical capability has allowed them to be much more confident that they're being effective, while generating an interesting result to inform other similar schemes.

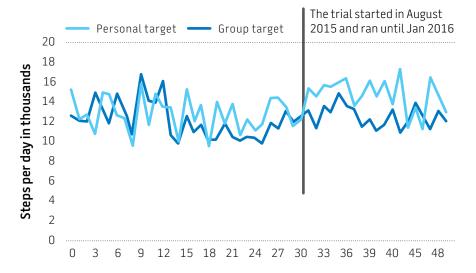
Figure 11: The personalised targets were more effective than the group targets, however, the incentive scheme overall still had a big impact.

We randomly split the teams into two types. One had personalised targets and other had a group target.

This was the person's average daily steps prior to the trial + 2500

This was the group's average daily steps prior to the trial + 2500





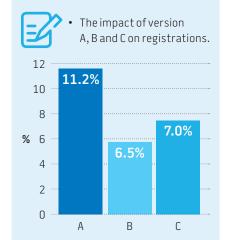
 $^{^{17}}$ Based on their levels of exercise in the six months before the trial started.

TRIALS IN ACTION





3 month trial.





 Those who took part in the campaign reduced energy consumption by an average of 606kj per day.¹⁸



 Asking people for a small commitment and clicking on the green box had a big (and surprising) impact in getting people to follow through on the challenge.

4. Testing the most effective messaging to increase campaign sign-up: VicHealth's H30 Challenge trial

Australians are big consumers of sugar-sweetened beverages. In 2006, Australia was amongst the top ten countries for per capita consumption of soft drinks¹⁹. The H30 Challenge was devised to help establish healthier habits, encouraging people to drink water instead of soft drinks, energy drinks, fruit drinks, sports drinks, ready-to-drink iced tea, flavoured water or cordial.

When the challenge was designed, there were hundreds of decisions made about how the website should be set out. Many of these almost certainly affected how people interacted with it. Even small changes in the ordering and presentation of information can have a large impact on people's behaviour.

Victorians can sign up to the H30 Challenge through the website, and in January to March 2015 we ran a simple RCT to make it as appealing as possible for people to sign up to the Challenge via the website. Digital platforms give us a brilliant opportunity to easily trial small variations in pages to find what's most effective, as randomisation is simple and data is automatically captured. We tested three versions of the H30 homepage, looking at which led to the greatest number of sign-ups completed for the H30 Challenge.

Version A: split the registration into two stages, with no details initially requested, and the full set required once visitors had clicked 'Sign up now'.

Version B: used a homepage asking for key contact information.

Version C: used the same homepage as Version B, asking for key contact information and subsequently asking for additional information captured in the full sign-up page used for Version A.

¹⁸ H30 Challenge data 2014–2015.

¹⁹ Australian Bureau of Statistics, Australian Health Survey. Consumption of Sweetened Beverages http://www.abs.gov.au/ausstats/abs@.nsf/ Lookup/4364.0.55.007main+features7102011-12 (retrieved 21 March 2016).

There was a series of rotating motivational messages present on all of the homepages.

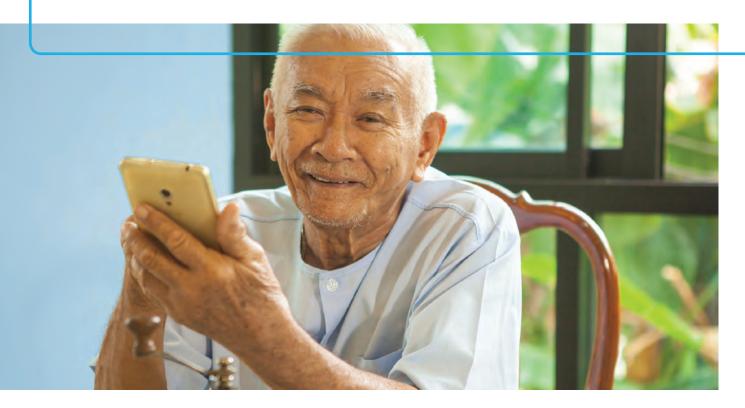
During the trial there were over 60,318 visits to the website. Version A was markedly more effective, with around 11 per cent of visitors signing up for the Challenge, compared to Versions B and C at around 7 per cent. We initially expected that having a single simple version, which asked fewer questions, would be more effective. Indeed, asking fewer questions is a maxim that is often used by market researchers and has been found in other A/B tests (Schrage 2012).

Why was there such a stark difference in sign-up rates for such similar pages? Although we can't be sure, we believe that it was due to perceived friction and wanting to finish what you start. Having a very low-cost initial commitment to signing up, that required no details, led to a large number of people clicking to sign up initially. If you ask for people's details straight away before they have committed, they may be less likely to engage at all.

This might initially sound like a small difference, but to put this in perspective, if Version A had been used for the whole trial period, more than 1000 extra Victorians would have signed up for the H30 Challenge. Importantly, follow-up survey data indicated that those who signed up through Version A performed very similarly at the Challenge to those who signed up through B and C. This is an important check as it suggests that lowering the perceived barrier to entry did not just cause low-motivation individuals to sign up, who would not take the Challenge seriously. These lessons have been applied to future VicHealth campaigns so they will continue to improve the user experience and help Victorians reach their goals to be healthier.



TRIALS IN ACTION





• 12 week trial.



 Response rate was greater when people were told their response contributed to collective understanding of health of their community, than when given a sense of urgency.



 Digital trials were a cost effective way to provide insights. There were virtually no additional costs to running this trial.



 Even minute details matter. Language and wording of text messages and letters make a big difference as to whether or not someone participates in a survey.

5. Tailored messaging to increase survey participation: VicHealth Indicators Survey

The VicHealth Indicators Survey is a Victorian community wellbeing survey. The survey is based on core questions related to VicHealth's Action Agenda. It complements other Victorian population health surveys, such as the Victorian Government's Victorian Population Health Survey, and focuses on factors that influence health, which are critical to informing decisions about public health action.

First conducted in 2007, this iteration of the survey collects a wide range of information from approximately 23,000 people and covers topics such as mental wellbeing, alcohol, healthy eating, physical activity, community safety, and gender equity. The 2015 survey contains core questions specially designed to track progress towards VicHealth's 10-year targets.

The survey is designed to support the development and use of local community wellbeing indicators as a tool for informed, engaged and integrated community planning and policymaking, to improve health outcomes and reduce health inequalities. This information is invaluable for local governments developing Municipal Public Health and Wellbeing Plans as required by Victorian legislation. Indicator data can provide health planners and social planners with tools to monitor and identify emerging trends and issues affecting health and potential areas for action.

A challenge for population surveys is ensuring adequate numbers of people participate, so that the survey respondents adequately represent the population of interest – in this instance, Victorian residents. This telephone survey used both landline and mobile phones, in order to maximise participation.

The language and wording of text messages and letters can make a big difference as to whether someone agrees to participate in a survey. This trial examined whether slight modifications to the letter and message structure and wording would affect the response rate.

The key concept was to trial message design and message content to determine what would be most effective in maximising public participation in the survey.

Three key elements were trialled in the text messages and letters, informing people that:

- the survey will improve our understanding of different contributors to the health of your community
- we need more people in your local area to take part in this survey
- no additional message (control).

Early results indicate that people who received an SMS about needing more people in your local area to take part (21 per cent) were marginally, but significantly less likely to respond to the message compared to the improving our understanding of different health contributors (23 per cent) message and the control (23 per cent) message. This suggests that people are more likely to respond to a text message of this type if it is brief and simple, or refers to a person's potential to contribute to increasing the understanding of the health of their community.

It must be emphasised that these finding are very preliminary and further detailed analysis is in progress.

Digital trials are often a great starting point for organisations that want to 'dip their toe in the water' and conduct a behavioural insights trial. VicHealth's experience showed the VicHealth Indicators Survey trial was the most easily implemented, and low cost of all our trials. The Social Research Centre saw the potential in testing the various letter and text messages and offered advice regarding bias and capture of data.

TRIALS IN ACTION





· Trial in progress.

6. Urban design solutions to encourage water consumption: City of Melbourne

Increasing consumption of water, particularly in place of sugar-sweetened beverages, is a priority area for VicHealth. The role of urban design and city planning in supporting this behaviour by increasing the availability of free water was an area that VicHealth wanted to explore further.

Water is now easier to access for free in Melbourne's CBD, with more than 60 drinking fountains now installed across the city through a joint initiative between VicHealth and the City of Melbourne. The fountains were installed in precincts with high volumes of pedestrians, in areas where people are known to take part in physical activities and recreation, and also in close proximity to outlets selling sugar-sweetened beverages. The new fountains feature bottle refill taps to make it easier to refill a drink bottle²⁰. Initial qualitative research suggested that there was a cohort of people who were simply unaware of the fountains and would use the refill stations if they knew they existed.

To test this further, VicHealth partnered with the City of Melbourne to develop and initiate a number of promotional activities. The primary purpose of this trial is to evaluate the impact of these promotional activities on water fountain use in the City of Melbourne.

²⁰ Research suggests (VicHealth 2015) that the inclusion of a water bottle refill tap can encourage consumption of tap water as it makes it easier for people to refill their water bottle when out and about in Melbourne.

Observational studies were undertaken by staff from Deakin University's Institute for Physical Activity and Nutrition (IPAN) (VicHealth 2015) to assess the number of users of the water fountain sites and their characteristics. Nine sites were observed during the point-of-drink promotional activity over two weeks. A 'Hydration Team' handed out drink bottles near fountains, as well as postcards that contained a link to the City of Melbourne's map of water fountains. Data is being collected so that the same fountains can be directly compared during and after the promotion period.

At the time of writing the study was still in field, but in the first week of activation, approximately 15,000 members of the public viewed the promotions in Melbourne CBD, across four days. Some of the comments from the public follow:

"This is a great way for me to fill up my bottle on my way into work. I never drink enough water in the mornings."

"Are these permanent fountains?"

Further analysis will be undertaken after the collection of the comparable data. However, by comparing data to that previously collected (September 2015) at some of the nine sites, the data collected during the promotional period indicates that there has potentially been an increase in usage. A preliminary assessment of the promotions involving the handing out of water bottles indicates a spike in usage and that a high percentage of people who received a promotional bottle proceeded to fill it at the refill station. While we are several steps away from linking use of the refill stations to a reduction in consumption of sugary beverages, the results from this trial will provide valuable information in assessing the effectiveness of urban design nudges in increasing water consumption.

Preliminary assessment of the data suggest the promotional activities at the water refill stations may have been successful in encouraging increased use.

TRIALS IN ACTION





· Trial in progress.

7. Increasing water consumption in sports settings and stadiums: Etihad Stadium

Stadiums and community sporting clubs can be important settings in health promotion. They actively promote one of the drivers of good health – physical activity – but can fall short in providing healthy food options for those spectating or participating in physical activity.

VicHealth has been working with sporting clubs to understand the opportunities and barriers to providing healthy eating options, and has offered resources and advice to support them in making changes. While grassroots work with clubs is gaining traction, large stadiums can be harder to influence, given they often have complex and longstanding contracts with caterers.

So it was of interest when Etihad Stadium, a large stadium located on the fringe of the Melbourne CBD, approached VicHealth with a proposal to work together to support the provision of free drinking water in the stadium. The stadium seats 52,000 and has a wide variety of retail food outlets, restaurants, function rooms and bars. In 2015, Etihad Stadium launched new policies to make sporting events more appealing and affordable, particularly to families. These initiatives included a new 'Conditions of Entry' policy to allow patrons to bring in commercial food and drinks, including water bottles – a previously unheard of initiative.

In a move to improve healthy choices and reduce the strain on footy fans' hip pockets, Yarra Valley Water's Choose Tap and VicHealth joined forces with Etihad Stadium in a three-year partnership to supply free drinking water at AFL matches and other sports and entertainment events at the venue. Ten drinking water fountains with flow meters were installed throughout the stadium. The fountains provide free, chilled drinking water to fans, and support the broader VicHealth water initiative, which aims to increase the intake of water by Victorians.

Simple messaging was developed and displayed above the drinking water fountains at Etihad Stadiums (for example 'Free water here' was one such message). During specific AFL matches, LED signage alerted patrons that free drinking water is available.

VicHealth has been collecting data on the flow meters since March 2015. Interim findings will be released in 2016 ahead of further trials in the following years. The insights collected to date highlight the significance of the cultural change represented by being allowed to bring water bottles into the stadium. Patrons are so conditioned by the practice of only being able to purchase beverages at the stadium that more effort on raising awareness of the presence of the fountains may be needed than originally anticipated.

BEHAVIOURAL INSIGHTS INFLUENCING VICHEALTH'S REGIONAL SPORT PROGRAM

The Leading Thinkers initiative has informed the implementation of the VicHealth Regional Sport Program, which commenced in July 2015. This program empowers Regional Sports Assemblies across Victoria to strengthen policy and practices to make water the beverage of choice in regional sporting clubs, leagues and facilities.

Behavioural insights workshops were held for Regional Sports Assembly staff, which provided an introduction to behavioural insights and how it can be used to create changes in community sporting clubs that will encourage the community to make healthier choices. From this workshop, the participants identified opportunities to better offer healthy food and drink in regional sport.

These opportunities are now reflected in Regional Sport Program project plans and the methodology of the La Trobe University²¹ project evaluation. VicHealth continues to provide support and guidance to Regional Sports Assemblies on the use of behavioural insights in their projects.

"It's amazing how successful 'Nudge Techniques' have been at influencing the beverage of choice of our participants. Simple changes that literally take a few minutes (rearrangement of a fridge or reprinting a price list with a focus on water) have made big differences to what people are buying. I guess the old saying of 'out of sight, out of mind' is really true and, given that bottles of water are our highest profit margin product, it hasn't done any harm to our takings at our canteens too!"

- Adam Wicks, Victoria Business Development Manager, Touch Football Victoria

"We've tested the nudge method with six clubs with varying success. The feedback and subsequent data collection has provided us with important information to determine what method works to increase consumption of water within local sporting clubs. Allowing clubs the choice of nudge methods meant we gained better club buy-in and they were better placed to want to participate in the trial.

It's been really interesting to understand what influences the decisions we make, and I see value in looking at how we can employ these methods in other aspects of our work."

– David Quinn, Executive Officer, Valley Sport, Shepparton

²¹ Lead researcher Dr Matthew Nicholson, Director, Centre for Sport and Social Impact, La Trobe University.

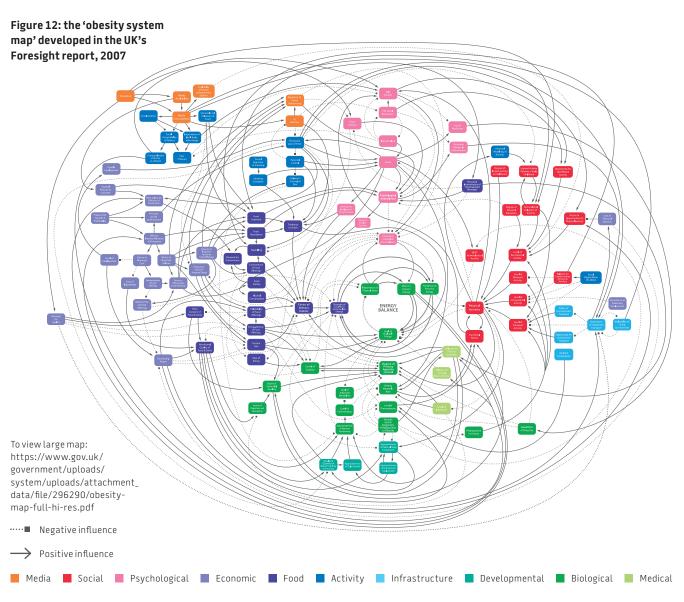
BI approaches to healthier, happier lives: case study on obesity

It's often said that the problems facing public health are 'multifaceted'. Issues such as obesity have many interlocking causes, sometimes leading policymakers to describe them as 'wicked problems': hard to unravel, relentless, and where the search for a single or 'magic bullet' solution is hopeless.

An original requirement from VicHealth was that the Leading Thinkers initiative should include a focus on obesity. Even outside the world of health, obesity is recognised as one of the great policy challenges of our time – and a classic example of a wicked problem. There's certainly no doubt about its fiscal and human costs, with countries such as Australia, UK and USA being particularly badly affected.

What's the problem?

On one level, the challenge of obesity seems a simple one: our calorific balance is off. In crude terms, we eat too much for the calories (or kilojoules) we burn. Compared with many other challenges, such as curing cancer or creating world peace, it doesn't look that complex. But once we scratch beneath the surface, it soon becomes clear why obesity is seen as a wicked problem. This complexity was documented in a widely referenced diagram by the UK's Foresight project, sponsored by the UK's Chief Scientist.



For many people, the Foresight obesity map is the very embodiment of a 'wicked problem'. Its sheer complexity, an endless tangle of feedback loops, seem to imply that no solution is possible at all. At best, the map is interpreted to say that obesity is a problem that requires everyone to play a role. More often, people interpret the map to imply that we are locked in a complex maze of interlocking causes that no one can see a route out of.

Though not intended to by its original authors, the Foresight map had a paralysing effect on many policymakers, including, I would argue, on many in Australia. I vividly recall a few years ago meeting the Chair of one of the UK's regulators of the communications and advertising industries, and noticed that he had under the glass of his coffee table a large print-out of the Foresight system map. Puzzled, I asked him why he had the map so prominently on display (I had not come to meet him to discuss obesity). "Ah!" he explained, "people are always telling me how advertising is the heart of the problem for this, and many other issues. But now I can point to this map and show that that's just not true: advertising is just a tiny part of the problem."

The map makes it possible for everyone to make the same argument. Advertisers can blame retailers. Retailers can blame producers. Producers can blame politicians. And everyone can blame consumers: industry is just making, selling and promoting what people want to eat.

The behavioural angle

Behavioural science has brought a new perspective to this puzzle, and particularly to unpacking what it is that 'people want'. An elegant illustration of what 'people want' around food is illustrated by a study in which workers were told that they had won a competition. When asked to choose their prize, to be delivered next week, around three in four chose a healthy fruit plate over chocolate (they were Danish workers). A week later, the delivery guy turned up full of apologies for having lost their paperwork and asked 'what did you want as your prize?' Guess what. Now three in four people chose chocolate instead (Read & Van Leeuwen 1998).

It's a study that makes most people smile, but it also makes a deep point: our preferences are not constant. The choices we make in the moment, or when we're hungry or thirsty, are not the same as those we make in advance or when we're not in a 'hot state'. In this sense, the modern world interacts with our psychology in problematic ways. Our brains and decision-making evolved in a world where food was often scarce. Faced with the immediate option of consuming kilojoule-rich, high-sugar and high-fat food, it is very hard to us to say no.

Behavioural science has gone much further in recent years, documenting what Brian Wansink has called 'mindless eating'. We saw earlier how many of the thousands of decisions we make every day are made by our non-conscious, or 'fast' brain (page 15). Our minds use rapid mental heuristics, or shortcuts, to figure out when to cross a road, whether a person is a threat or foe, or indeed whether to eat that chocolate in front of us. This automatic decision making, such as mindless eating, is especially powerful when our conscious minds are busy doing something else, such as working hard or watching TV. Little wonder that most people find that if they bring a bag of chips to eat a few while watching a game or a movie on TV, the whole packet gets eaten. Similarly, laboratory and fieldwork studies have shown that:

- Larger plates, serving spoons, or packages make people eat more and the
 effect is large.
- More varied foods make people eat more.
- Having food physical availability, such as a jar of cookies on our desk rather than few feet away, make us eat more.
- Food sales are strongly boosted from ends of aisles and check-out positions, and after we have already made many choices.
- Cartoon characters added to foods not only make children more likely to choose foods, but make them perceive them as tasting better.
- Most people, and particularly those who are more overweight, are literally unaware
 of much of what they eat.

Fortunately, understanding the psychology of what drives our eating also opens new channels for intervention too, and we explored a number of these with VicHealth and partners (see The Alfred Hospital trials, page 28).

From individual trials to catalysing a social movement

Consumers aren't especially loyal to big retailers or chain outlets. We also know that, on reflection, most consumers would like to eat more healthily. This creates a significant opportunity to reverse the cycle of obesity by encouraging consumers to switch allegiance to healthier stores, in turn rewarding those stores with healthier profiles and encouraging the rest to do better.

This can be uncomfortable territory for governments, but is an area where armslength bodies and consumer groups can wield their greatest power. Many commercial players work on tight margins, so losing even a very small percentage of their regular shoppers to a rival can be a significant blow. Helping to empower consumers, such as by creating simple online checklists that people can use to rate the healthiness of their local stores and restaurants, could be a game changer. Such ratings might include factors such as:

- What is on display at and around the check-outs, and in particular, what proportion of the items are high-sugar, high-fat foods?
- What is on display at the end of aisles, and what proportion are healthy options?
- What proportion of foods have clear, prominent and easy-to-understand labels?
- What proportion of special offers are on healthy foods?
- What proportion of cartoon and child-focused packaging is on healthy foods?

...and for restaurants

- Are healthy options, like salads and fruits, available (and at all times)?
- Are the healthy options tasty, appealing and well-priced?
- Is there clear information about the calorific content of menu options?
- What proportion of the menu could be described as healthy?
- How large is the 'regular' (medium) size? (if applicable)
- Is the pricing strongly skewed to promoting 'supersizes'?

The beauty of enlisting the help of consumers themselves is that this is empowering and impactful. It benefits not only the minority of more active consumers, but also greatly benefits those who are less active too. Because of the power of mindless eating (and shopping), as retailers and restaurants change their internal markets and ranges, they help all consumers eat more healthily. Their restocking decisions also reward and encourage producers to reformulate to make their products healthier.

It's what has been called a triple nudge (Halpern 2015). We nudge consumers to make slightly healthier choices. Consumers nudge retailers and producers to offer healthier lines. And the changed practices and healthier products in turn nudge consumers to eat more healthily. In essence, it is a strategy that seeks to reverse the cycle that has driven our 'obesogenic' culture, harnessing the power of consumer power and the commercial sector to make the healthy choice the easy choice. It moves us to a world where levels of added sugar gradually drop, particularly in hidden forms such as in sauces and drinks where our tastes rapidly adapt; to where portion sizes of popular foods, and treats in particular, become slightly smaller; and where, when we are in a hurry and our minds are on other things, the healthy choice becomes the easy choice.

In my view, using these types of approaches, we have every reason to believe that the 'obesity epidemic' that has swept our societies, and particularly blighted those from less advantaged backgrounds, can be reversed. Our kids do not have to be condemned to live shorter and sicker lives than us.

We nudge consumers to make slightly healthier choices. Consumers nudge retailers and producers to offer healthier lines. And the changed practices and healthier products in turn nudge consumers to eat more healthily.

Price

Some people have the curious idea that behavioural scientists aren't interested in price. This idea stems from some academic discussions – and the position of some policymakers especially in the USA – that 'nudges' are all about small prompts and information, and that economic instruments don't count.

That's clearly nonsense. There are many areas where price — and conventional economics — is a pretty good guide to what people will do. Psychology and behavioural insights have helped us develop a more nuanced understanding of this. For example, it has shown us that people sometimes respond to price signals in ways that don't fit with a classical economic model, and in particular how responses to differences in price can be highly non-linear. For example, moving the price of a plastic bag in a store from 5p (10 cents) to 10p (20 cents), will lead to a few less taken, but not many. Yet moving the price of a plastic bag from zero to 5p leads to a near collapse in the numbers that shoppers take — in the case of a recent change in the UK, to an 80 per cent reduction. Similar non-linear effects have been found in the prices of other items, including food and chocolate.

Suffice to say, there are good grounds to think that moving the price of unhealthy foods relative to healthy ones can have a significant impact on consumption. One of the key findings in the literature on price psychology is that people are often insensitive to the absolute price of items, but are extremely sensitive to the relative prices of similar or related items.

It was not in the power of VicHealth to vary the taxes on unhealthy foods, though VicHealth has supported important work in this area²². However, one of the most interesting trials that we were able to test with the help of The Alfred Hospital was the impact of varying the relative price of high added-sugar drinks versus healthier alternatives (see page 28). The results were conclusive, and align closely with previous modelling work by BIT, with the higher prices leading to a significant shift in sales to healthier options.

A number of countries are now experimenting with differential taxes on healthy versus unhealthy foods. Particular attention has fallen on added-sugar drinks, and for a good reason. For a price signal to work, there has to be a similar alternative to switch to (such as water or low-sugar drinks). There also have to be good grounds for thinking that the price won't just lead to substitution of another product or ingredient (this is a particular challenge for solid foods, where fat and sugar are often substituted).

Early evidence, particularly from Hungary and Mexico, suggests that such taxes can significantly shift behaviour, though the detail of the design matters too. Equally important, early results suggest – as discussed – that the price can act as a 'triple nudge' with respect to obesity, and to sugar consumption in particular. The price signal leads to at least some consumers shifting to healthier alternatives. This prompts retailers to increase their stocks of healthier alternatives, and manufacturers to develop products with less added sugar. This expansion of healthier products in turn shifts the consumption patterns of consumers, including those who are less active in their choices.

While drafting this document, the UK government announced (in March 2016) to introduce an added-sugar tax for drinks sold in the UK, albeit delayed until 2018 to give manufacturers time to adjust and reformulate. It is a two-level tax, starting for drinks with more than 5 grams of sugar per 100 ml, and stepping up again for drinks with more than 8 grams of sugar per 100 ml. These levels have been deliberately chosen to drive reformulation.

The evidence for this UK move came from many sources, including the VicHealth–Alfred trial. But critically, the shift also rested on the building of public and political support to act. And it is to this building of support that we now turn.

²² The Effects of Taxing Sugar-Sweetened Beverages Across Different Income Groups, Anurag Sharma, Katharina Hauck, Bruce Hollingsworth and Luigi Siciliani Health Econ. (2014), Published online in Wiley Online Library (wileyonlinelibrary.com). DOI: 10.1002/hec.3070 (retrieved 26 March 2016).

Who's at the helm?

There's a curious paradox at the heart of many lifestyle issues. When we ask in surveys, "who's fault is an issue such as childhood obesity?", the majority of people say "parents" and "individuals". But when those same surveys ask "who should do something about it?", the majority of people say "government" or "business".

On the other hand, many governments and businesses across the world have been very nervous of acting decisively. Having seen more of the psychology of eating, we can see why businesses might be hesitant to act unless consumers themselves signal a healthier direction of travel. But government?

The fact that most people are relatively unaware of the powerful forces that drive their eating, and other lifestyle habits, helps to explain why politicians have been hesitant to act. Although the public seem to say they want something done, politicians suspect that if they do table proposals that might work, such as restricting unhealthy products at check-outs, or encouraging reductions in added sugar through taxes or other measures, the public and media will erupt in outrage. Governments and politicians seem stuck between a 'rock and a hard place'.

I've long felt that governments need to find a way out of this trap, and that perhaps the best way of doing this is to ask the public – really ask them. When governments run consultations, these are generally dominated by special interest groups and by the industry and professional groups that are most directly affected. Most people are too busy getting on with their lives to weigh in on the details of any particular policy consultation. The closest most people come to policy debates is a sceptical glance at a headline in the paper, and a sense that there's a group of insiders talking to each other in a closed room somewhere.

Imagine instead that governments asked a statistically representative group of the public to listen to the evidence, to each other, and to offer a considered view about what they think is the right thing to do. After all, it's those citizens' lives and lifestyles we're talking about.

Much to my delight, VicHealth agreed. In what was perhaps the highlight of the residency, VicHealth set about organising a citizens' jury on obesity to ask a sample of Victorians to look through the evidence and decide what they thought would be the right thing to do.

There were some in the public health and expert community who thought this a very risky idea. Would a sample of 'ordinary' citizens really be able to wade through the complex evidence and policy options, and come up with a sensible set of solutions? Wasn't there a risk that a few people in the group would push the rest towards one solution or another, or perhaps decide that nothing should be done at all other than to leave people to get on with their own lives in peace? And some experts thought there was little point in asking the public what to do, since the experts already knew – they just needed the politicians to get on and do it!

The point of a genuine engagement with the public is not so much to ask them to become another group of experts, but for the public to engage with the existing experts – and trade groups and others – and offer a view from the perspective of their own lives. We're asking for a view, and for 'permission', not necessarily for a totally new plan – though if they have new and better ideas, we should certainly listen to those too.







Setting up Victoria's Citizens' Jury on Obesity

A great deal of work went into setting up Victoria's Citizens' Jury on Obesity. In the UK, we did hold a deliberative jury at 10 Downing Street in 2007, but it was still a very rare occurrence in most national governments. There are also a lot of choices to be made about the format, size and process to be followed in their design. Details of the process can be found in the *Victoria's Citizens' Jury on Obesity Insights Report*, but the key elements are summarised in box 2. In total it took nearly a year to plan, conduct, and report on.



For the independent group who designed the jury process, it involved a number of challenges and new elements to previous juries, certainly in Australia and probably in the world. At 100 it was bigger than most juries (which typically involve 15–40 people, and legal juries of course involve only 12) incorporating elements of larger deliberative formats, including a large enough sample to be able to make a more confident claim on representativeness. This created extra work and complexity, such as increasing the number of facilitators required. The use of a strong online element was relatively new, and likely to be of use for future deliberations. The topic also raised additional sampling issues, in particular concern that the sample needed to be representative in terms of body weight, despite this not being covered by normal sampling frames.

The consensus was that these challenges were addressed, and the jury was a genuinely descriptive representation of Victorians.

BOX 2: THE PROCESS BEHIND THE VICHEALTH CITIZENS' JURY ON OBESITY

A representative steering group comprising key government, industry, public health and community decision makers was convened by VicHealth. The group was established as a stakeholder engagement strategy, and to respond directly to the jury's 'asks'. VicHealth deliberately chose the language of an 'ask' as opposed to a recommendation, in recognition that neither the jury, VicHealth nor the steering group were positioned to implement the jury's findings directly. VicHealth's emphasis was on a collaborative process that enabled consensus among the jurors and elicited their view on what actions are needed across government, industry and civil society.

VicHealth engaged independent specialists with expertise in democratic innovation, 23 deliberative facilitation 24 and UX (user experience) design²⁵ to design and implement the process. A media partnership was developed to amplify the jury's work, to ensure that the materials and process could be followed by the wider public.

Around 100 Victorians were selected to be the jurors. They were selected through a multi-stage process to ensure that they were a descriptively representative sample. This included a first stage random sample (the 'sampling frame') of several thousand, who were asked a small number of questions about sociodemographics and their knowledge and interest in the subject. This ensured that the final sample was not only representative in terms of demographics such as age, gender and class, but also in terms of their knowledge and interest in the subject. This is a key difference from a normal 'consultation', which tends to be dominated by those who have more expertise or interest in the subject.

Jurors were given access to more than 60 background papers on obesity from a range of interest groups, including papers prepared especially for the jury. Jurors were organised into a number of online groups to help them divide up the reading and material. They could also post further material themselves for other jurors to read.

External stakeholders could view the discussion forums, but not interact directly other than to offer further readings to the group as a whole if they felt that a key gap had been identified.

After six weeks of online deliberation, the jurors were brought together for a weekend of discussion and debate in the city of Melbourne. The jurors themselves were able to choose and vote on experts that they particularly wanted to hear from. A team of independent facilitators managed the process, and made sure that all the jurors were able to get their point of view across.

Towards the end of the weekend, jurors drafted, and then voted on, 'asks' that they would like to make. To make it into the final report, 'asks' had to achieve at least 80 per cent support among the group.

The jury's report contained 20 'asks' of government, industry and civil society. These were presented to the stakeholder steering group for a direct response.

The Herald Sun was the official media partner and tracked the entire process, running readers' surveys, reporting on the jurors' personal journeys and on the final report and what happened to it.

²³ newDemocracy Foundation is Australia's leading democratic innovation research institute. As a non-partisan organisation with no interest in the issue or $stake holders, the institute \textit{ was engaged to design} the \textit{ process}, \textit{manage the recruitment} and \textit{ selection of jurors}, \textit{and oversee submissions to the jury}. This \textit{ process} is the \textit{ process} is \textit{ proce$ was deliberate to ensure integrity of the process was maintained throughout project delivery.

²⁴ MosaicLab is a collaboration of facilitators who specialise in deliberative processes. The team was responsible for designing and facilitating discussions and activities for both the online component and the face-to-face event. They supported the jury to stay focused on the remit before them - working through the activities for both the online component and the face-to-face event. They supported the jury to stay focused on the remit before them - working through the activities for both the online component and the face-to-face event. They supported the jury to stay focused on the remit before them - working through the supported the supported them - working through the supported thsubmissions, determining who they wanted to hear from at the face-to-face event, and to ultimately turn their initial ideas into concrete 'asks'.

²⁵ Wildwon is an end-to-end experience design and event production company which specialises in knowledge, innovation, sustainability, social change and advocacy events designed to create meaningful and lasting impact. The team was responsible for designing and facilitating discussions and activities for both the online component and the face-to-face event. They supported the jury to stay focused on the remit before them – working through the submissions, determining who they wanted to hear from at the face-to-face event, and to ultimately turn their initial ideas into concrete 'asks'. They worked with VicHealth ICT and MosaicLab to build the online portal using Zimbra, an online collaboration platform.

I think we will see far more of these deliberative juries in the future. They not only lead to some pretty sensible recommendations, but also get government out from the 'rock and a hard place' that they often find themselves with respect to lifestyle issues in policy. In essence, they give instruction and permission for governments to act, and we should listen to them.

Results

Victoria's Citizens' Jury on Obesity proved effective, decisive and moving. It was very striking how the Victorians selected for the process came from all walks of life, and from across the state. Many of those involved in the organisation of the process, myself included, wondered about how realistic it was for jurors to spend 15 hours or more reading and debating the materials in their own time in the run-up to the weekend. But most jurors spent at least this level of time and commitment, and many spent more.

The weekend of face-to-face deliberation was similarly striking, with the jurors throwing themselves into the topic with seriousness and diligence. The expert witnesses that the jurors had pre-selected to present, and that newDemocracy Foundation had worked to secure, were impressive and expressed a range of interesting views. The jurors generated their own long-list of proposals from the material they had read and heard and then, with the help of the facilitators, organised into groups to fine-tune the wording and details of the proposals. The forum culminated in a marathon session at which the jury took each proposal in turn and voted on it, with a threshold of 80 per cent agreeing for the proposal to go through to the final report. Where the vote was close, objecting jurors had an opportunity to refine the proposal, and to put the revised wording to a second vote.

For those observers watching, including representatives from government, industry and VicHealth, it was a genuinely dramatic and exciting process. The 20+ 'asks' that made it through, far from being the confused or weak list that some had feared, were a coherent and strong list (see Further reading – The report of Victoria's Citizens' Jury on Obesity).

These were not weak 'asks'. There is no government in the world that has yet introduced a 20 per cent added-sugar tax, though some are now moving in this direction, including the UK. Recall that a major reason why governments have not moved in this direction is not efficacy (see the Alfred trial on price differentials, figure 9). Rather the concern is that citizen-voters will object. Yet, as Victoria's Citizens' Jury on Obesity showed, when shown the evidence and given the chance to debate it, these same voters felt that it was right to introduce this measure even though it would hit their own pockets.

Some of the finer details of the process were worth noting too. One concern of the organisers and some participants had been how the more overweight jurors would feel and be treated. Yet as a number commented quite movingly at the end, they felt able to express their own views and concerns openly and at ease, and felt respected by other jurors in the process. Indeed many jurors commented on the process, and how good they had felt it to be, and asked why more such decisions were not shaped in this way.

The Herald Sun was also struck by the level of interest and engagement from their readers. A poll that they organised attracted an unprecedented level of responses. It was also striking that the paper strove to report on the jury in an impartial and informative way, even though they must have had private worries about the concerns of some of their commercial advertisers from the food and drink trade.

In the weeks following the jury, the stakeholder steering group met to review and respond to the jury's 'asks'. These commitments were subsequently published (see Further reading – Response from the steering group).

Impact

Did every 'ask' get acted on? No — certainly not at the time of writing this. Speaking personally, I was a little disappointed not to see a stronger response by some of the stakeholders, but I've also learnt as a policymaker that sometimes these things take a little time to work their way through the system, especially if they challenge previous assumptions.

Was it worth running the jury? It may be too early to say, but I think the answer is an emphatic "yes". The process showed policymakers, retailers and producers that they may be substantially misreading, and perhaps underestimating, Victorians. It gave a much more precise sense of public acceptability on specific policy options (such as at what level, if any, a sugar tax would be accepted). Though many of the 'asks' would have been familiar to policymakers, a few were relatively novel too, such as easing the rules and practices that restricted local farmers from supplying fresh fruit and veg to local communities if they were in a contract with a major retailer.

There were lessons learned too – important for future policy issues taken to similar deliberative processes. A number of jurors felt it would have been better, at least in retrospect, to have held a face-to-face meeting at the beginning as well as the end of the jury. Against this, there were concerns that this could have elevated the demands on jurors (though could have been offset by a shorter last session), costs and drop-out rates. The jurors were also given total control over which experts they heard from over the final weekend. Several felt that it would have been better, perhaps at a day at the beginning of the process, to have heard from a range of contrasting experts selected by the stakeholder steering group. Speaking for myself, I feel it would have been good for the jury to have heard more from retailers and producers, not least for the jurors to have learnt more about how the industry works. I think this would have helped the jury fashion more careful options in relation to what industry could do - noting that most of the jury asks were quite government-focused – and would have ensured that industry and other stakeholders all felt that they were able to have their 'fair say'. That said, I don't want to overstate the issue: industry made detailed written submissions to the jury, and did have an opportunity to take part in a Q&A session with groups of jurors over the final weekend.

In sum, VicHealth – and the citizens of Victoria – did something really amazing in this jury. They laid to rest the arguments that these issues are too complex for the public to understand, and that a jury of citizens would act in a narrowly self-interested way. The list of asks provides a landmark judgement in relation to obesity policy. Perhaps even more importantly, Victoria's Citizens' Jury on Obesity has shown governments across the world how such an approach can be used to deeply consult the public, pushing the frontiers of combining both online and in-person debate.

I think we will see far more of these deliberative juries in the future. They not only lead to some pretty sensible recommendations, but also get government out from the 'rock and a hard place' that they often find themselves with respect to lifestyle issues in policy. In essence, they give instruction and permission for governments to act, and we should listen to them.

Tracking progress

Governments around the world are exploring innovative models to develop better, and more enduring, public policy. Approaches which promote greater democratic participation, such as citizens' juries, are showing promise²⁶ as an effective and collaborative approach to finding impactful, long-term solutions.

Victoria's Citizens' Jury on Obesity has delivered 20 clear actions to promote healthier eating and tackle rising rates of obesity. The jury's asks provide governments, industry and public health advocates with a blueprint for action, determined by citizens and based on expert evidence.

Ultimately, long-term sustained impact related to healthy eating behaviour can only be achieved through a systemic response. This would require coordinated action from numerous stakeholders, government and industry groups.

As an organisation, VicHealth committed to responding to several of the 'asks' of the jury. These 'asks' – and VicHealth's specific response – are included in the following page.

Over the coming year, VicHealth will monitor the actions of government, stakeholders and industry. VicHealth will also actively work with policymakers, public health and consumer advocates, and industry to promote the jury's asks.

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²⁶ http://www.ncbi.nlm.nih.gov/pubmed/24657639; http://c.ymcdn.com/sites/www.iap2.org/resource/resmgr/imported/Journal_Issue1_Irving.pdf; http://heapro.oxfordjournals.org/content/13/4/273.full.pdf

 ${\it Table 2: Out of the 20 `fasks' from the Jury, VicHealth has committed to the following}$

Ask	VicHealth commitment
Ask 1: Provide ongoing funding for community level programs that encourage healthy eating.	VicHealth trialled this approach in a Seed Challenge (2013) to support innovation in local fresh food production and distribution so that nutritious food is sustainable, available and affordable for all Victorians. The two winning ventures shared \$100,000 of capital investment. They also received 12 months of mentoring and additional support to enhance their business models.
	 Open Food Network is an online marketplace making it easier for farmers, consumers and independent food enterprises to connect, trade and manage their business, resulting in the consumer having easier access to affordable local food. 3000acres has now facilitated the conversion of seven plots of underutilised land into productive community gardens, thereby taking food education to the streets.
Ask 2: Mandate healthy eating and cooking as part of the school curriculum from pre-school to year 10.	VicHealth will have initial discussions with the Department of Education along with partners, such as the Stephanie Alexander Garden Program and others to determine the most appropriate way forward.
Ask 3: Develop an ongoing 'Life Be In It' or 'Slip Slop Slap' style campaign for healthy eating across all types of media.	VicHealth will look at media opportunities through our existing consumer campaigns to include healthy eating messages. A Salt Reduction Strategic Partnership led by VicHealth commenced in May 2015. Its aim is to help reduce high salt intake by supporting policy and initiatives that ensure a healthier food supply. VicHealth will work with food industry partners to find solutions to lowering salt in foods and meals, and undertake research and monitoring to ensure progress towards the salt reduction targets set by the World Health Organization.
Ask 6: Amend State planning regulations to improve access to fresh produce by: • requiring the incorporation of edible, green spaces in new housing and community developments • protecting a proportion of fertile land for agricultural purposes as opposed to housing development, specifically in the 'green belt' surrounding the outer suburbs.	VicHealth will discuss this matter with the Parliamentary Secretary for Health, the Hon Mary-Anne Thomas MP. VicHealth supports the Open Food Network, an innovative not-for-profit network that connects local farmers directly with customers and local distribution hubs, making it easy to buy and sell affordable, fresh food straight from the farm.
Ask 7: Make drinking fountains and taps freely available, accessible and visible at public events and places, parks and shopping centres.	VicHealth is conducting trials to increase foot traffic to water fountains installed at Etihad Stadium. The fountains were installed as a joint partnership between Yarra Valley Water and VicHealth.
Ask 8: Restrict visibility and accessibility of 'Red traffic light' drinks and foods at the point of sale (where you complete the sale).	VicHealth will be working with the City of Melbourne to restrict visibility and accessibility of 'red light' drinks and food at the point of sale as part of their existing Healthy and Nutritious Food Choices program.

Conclusion



Figure 13: The Eight Hour Day Monument (1903). Melbourne led the way across the world in moves to ensure that workers could lead balanced lives of work, leisure and sleep. I got to walk past the memorial on my walk into VicHealth. Perhaps it is no coincidence that Australians continue to lead the world in contemporary surveys on wellbeing more than a century on.

Once again, Australians, and Victorians in particular, can lay claim to leading the public health world. Over the last two years of this residency, VicHealth has pushed itself – and Victorians with it – to innovate on three frontiers:

- 1. to explore and apply the latest behavioural science research to the health and lifestyle issues facing modern societies
- 2. to learn and apply more empirical methods to its work, in particular a trial-based approach in its work and that of its partners
- 3. to engage and empower Victorians themselves in helping to shape the state and nation around what they would like to happen around their health, and the influences on it.

No government gets policy and practice right in every respect, especially with institutional legacies slowing us down. But I would like to commend how VicHealth has embraced these innovations. VicHealth can rightly claim to be a unique health institution not only in Australia, but in the world. It is fleet-of-foot, a candid friend of government but licensed to try new things, and open to looking to the challenges of tomorrow, not just yesterday. It is prepared to learn from and apply behavioural science, actively adopt rapid experimentation and trialling and push the boundaries of sophisticated public deliberative forums in policy development.

Yes, there are other places that are doing each of these things, but doing them all in one place is truly world leading.

As I write, the UK is due to shortly release its own national obesity strategy, and has just announced that an added-sugar tax on beverages will be introduced by 2018. Suffice to say, the strategy will draw on a number of lessons and results from the pioneering work that has been happening in Australia. Obesity is an issue that concerns many countries across the world, with others 'catching up' on obesity rates in a race no one wants to win.

Perhaps even more shocking is how fast obesity is rising in the developing world: for every 10 per cent of GDP growth in developing nations, there is a 6 per cent reduction in childhood obesity, but also a 7 per cent rise in maternal obesity. We need to crack this so called 'wicked problem', not only for ourselves, but for the world, and particularly for the young and the less affluent who are hardest hit. We certainly should not allow its seeming complexity to defeat us, or lead to 'analysis-paralysis' or a diffusion of responsibility, such that whoever we are, obesity is someone else's fault.

There are plenty of new challenges too, beyond obesity. Wealth brings new choices to individuals and societies. It gives us the capacity to eat well, or unhealthily; to exercise or watch TV; and to escape from others, or to spend more time with them. Our answers to challenges need to be rooted in an understanding of how real people live, think and choose — not in the over-simplified 'econs' of economic theory.

I also wanted to say a more personal 'thank you' to the people of Victoria, VicHealth and especially to Jerril Rechter for asking me to be the inaugural Leading Thinker. From the collective wisdom of the 100 Victorians involved in Victoria's Citizens' Jury on Obesity; to the visit to the sports and community centres of Shepparton; and to the day-to-day struggles of the VicHealth team as they sought to weave into their work behavioural and experimental approaches, I was left with a deep sense of good people trying to do right by their fellow citizens.

Finally it gave me a valuable chance to get away from the day-to-day policy challenges of the UK, and to see what our cousins on the other side of the world were wrestling with. I got a chance to think about some of the deeper issues that the application of behavioural science and experimentation to policy throws up. It probably even helped me get across the line the book *Inside the Nudge Unit* – and adding a good smattering of Australian examples along the way. I hope that Victoria will prove as stimulating to future visiting thinkers too. Thank you.

David Halpern

D.S. Any

VicHealth's Leading Thinker (2014-2016)

Ultimately, others must judge, but the legacy of this residence seems to me to have been a genuine sharing of expertise, hot-housing the application of behavioural insights methods and approaches for VicHealth and its partners in Victoria, and the prototyping of a new way of connecting policymakers with the citizens they serve.

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Further reading

The report of Victoria's Citizens' Jury on Obesity

Download:

View the report of Citizens' Jury on Obesity – 18 October 2015 (PDF, 597 KB)

https://www.vichealth.vic.gov. au/~/media/ProgramsandProjects/ HealthyEating/Attachments/ VicHealth%20Citizens%20Jury%20 on%200besity%20-%20Final%20 Report%20-%200ctober%2018th%20 2015.pdf

Response from the Steering Group

Download:

Response from the Steering Group – 4 December 2015 (PDF, 913KB)

www.vichealth.vic.gov.au/~/media/ ProgramsandProjects/HealthyEating/ Attachments/VicHealth%20Citizens%20 Jury%20on%200besity%20Steering% 20Group%20Response_3%20Dec%20 2015.pdf "The real step forward is not so much to recognise that humans are, in general, influenced by a range of influences and factors, but to build and apply this knowledge in a systematic way."

- David Halpern, Chief Executive, Behavioural Insights Team



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