

FORESIGHT

Drugs Futures 2025?

The Scenarios

OFFICE OF SCIENCE AND TECHNOLOGY

While the Office of Science and Technology commissioned this report, the views are those of the authors, are independent of Government and do not constitute government policy.

Contents

1	Introduction	1
1.1	The Brain Science, Addiction and Drugs Project	1
1.2	This report	2
2	Scenario Planning	3
2.1	Introduction	3
2.2	Stage 1: Identification and analysis of change drivers	3
2.3	Stage 2: Identification of predetermined elements and critical uncertainties	4
2.4	Stage 3: Construction of the scenario matrix	4
2.5	Stage 4: Construction of the scenario narratives	4
2.6	Working with the completed scenarios	5
3	Overview of the Scenarios	6
3.1	Introduction	6
3.2	The matrix	6
3.3	High Performance	7
3.4	Neighbourhood Watch	8
3.5	Dispense With Care	8
3.6	Treated Positively	9
3.7	Comparison chart	9
4	High Performance	11
4.1	Context	11
4.2	Historical development: the perspective from 2025	12
4.3	Summary of historical events	19
5	Neighbourhood Watch	20
5.1	Context	20
5.2	Historical development: the perspective from 2025	21
5.3	Summary of historical events	28

6	Dispense With Care	29
6.1	Context	29
6.2	Historical development: the perspective from 2025	30
6.3	Summary of historical events	36
7	Treated Positively	37
7.1	Context	37
7.2	Historical development: the perspective from 2026	38
7.3	Summary of historical events	44
8	Working with the Scenarios	45
8.1	Introduction	45
8.2	Gaming	45
8.3	Windtunnelling	46
8.4	Reverse engineering	47
	Appendix: Methodology	48
	Acknowledgements	56
	List of publications: Drugs Futures 2025?	57

1 Introduction

1.1 The Brain Science, Addiction and Drugs Project

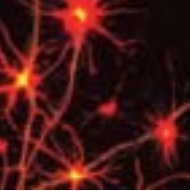
The UK Government's Foresight programme is managed by the Office of Science and Technology and exists to produce challenging visions of the future to ensure effective strategies now.

The aim of the Brain Science, Addiction and Drugs Project, announced in July 2003, is to provide a vision of how scientific and technological advances may impact on our understanding of addiction and the use of psychoactive substances¹ over the next 20 years by answering the following key question:

How can we manage the use of psychoactive substances in the future to best advantage for the individual, the community and society?

As part of the suite of tools designed to answer this question, the project team commissioned Waverley Management Consultants and Henley Centre to develop a set of scenarios which describe four alternative views of the future socioeconomic context in which psychoactive substances will be used.

1 Foresight has defined a psychoactive substance as '*any substance or surrogate intervention that affects brain function through its chemical neurotransmitters. The term includes recreational, psychiatric, cognitive enhancing or mood-altering drugs and also future technology such as trans-cranial magnetic stimulation or neural prosthetics.*' In this document, the term 'drug' is used to signify a psychoactive substance.



1.2 This report

This report contains the output from the scenarios exercise. It is divided into eight sections and an appendix:

- Section 1: Introduction
- Section 2: Overview of scenario planning
- Section 3: Overview of the Brain Science Addiction and Drugs Scenarios
- Section 4: Scenario 1: *High Performance*
- Section 5: Scenario 2: *Neighbourhood Watch*
- Section 6: Scenario 3: *Dispense With Care*
- Section 7: Scenario 4: *Treated Positively*
- Section 8: Working with the scenarios
- Appendix: Methodology (provided by Henley Centre)

2 Scenario Planning

2.1 Introduction

Scenarios help people imagine and manage the future more effectively. The scenario process highlights the main drivers and uncertainties surrounding a given policy area or activity and explores how they might play out in the future. The result is a set of stories that offer alternative views of what might happen if certain trends – most of which are observable today – continue to a logical conclusion.

There are four broad stages in developing scenarios:

- Stage 1: Identification and analysis of change drivers
- Stage 2: Identification of predetermined elements and critical uncertainties
- Stage 3: Construction of the scenario matrix
- Stage 4: Construction of the scenario narratives.

Sections 2.2–2.5 provide an overview of each of these stages. The specific methodology used in this project can be found in the appendix.

2.2 Stage 1: Identification and analysis of change drivers

Change drivers are factors which shape the future environment. Some are highly visible now, but others are less so. While it may be possible to determine the effects of change drivers on the present and the near future, it can be less easy to determine their effects in the medium to long term.

It is therefore important during this stage of the scenario process to identify a broad range of drivers and to consider which will be most important in the future – rather than to focus solely on those which are most important today.



Typically at this stage, therefore, drivers are prioritised according to their future policy importance.

2.3 Stage 2: Identification of predetermined elements and critical uncertainties

Once drivers have been prioritised, the next step is to consider how the important ones might play out in the future. In some case, drivers will be predetermined elements and their outcome will be quite clear. Other drivers will have uncertain outcomes. It is important during this stage of the scenario process to identify and characterise both types of outcome. For uncertain drivers, it is essential at this stage to identify the nature of the uncertainty and the range of possible outcomes. It is also important to explore the dynamic interplay between drivers over time.

The critical output from this stage is a number of 'axes of uncertainty' which describe the range of uncertainties for the future, together with the range of possible outcomes. These uncertainties are used to define the scenario space and to shape narrative production. Predetermined elements define strategic issues that need to be addressed across all the scenarios.

2.4 Stage 3: Construction of the scenario matrix

The scenario matrix is a 2x2 schematic that defines the main parameters of the scenarios. It is constructed by juxtaposing the two axes of uncertainty that reflect the most important uncertainties, offer the most insight, or provide the most intriguing glimpse of the future.

Matrix construction is an art rather than a science and the final 2x2 is often decided through negotiation, intuition and testing.

2.5 Stage 4: Construction of the scenario narratives

The scenario narratives are constructed within the logical framework provided by the scenario matrix. The narratives draw on all the material in stages 1 and 2 and also on wider research, such as the state-of-science reviews commissioned as part of the Brain Science, Addiction and Drugs project. The narratives can either describe 'end states' – what the world looks like in the

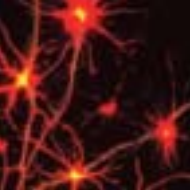
future, without any sense of how that future evolved – or 'timelines' – a description of how the future has evolved from the present day. The narratives should present the perspectives of different stakeholders in order to provide a sense of the different priorities and issues that exist in each future.

Wherever possible, stakeholders should be involved in testing and exploring the emerging scenario narratives.

2.6 Working with the completed scenarios

Once the scenarios are completed, they can be used by policy makers and their organisations to explore how they would act in the different futures. These users can evaluate different policy options, identify success criteria and determine the effect of different policy instruments. Generally, these differ in each scenario and the discussion can help participants build a shared understanding of how the increasingly complex changes taking place in the world are likely to affect their activities.

Policy makers can also use the scenarios to explore the issues and choices facing them today. All scenarios contain elements of today extrapolated to a logical future conclusion. Exploring them allows policy makers to see the consequences of making – or not making – certain policy decisions that might be facing them in the near future.



3 Overview of the Scenarios

3.1 Introduction

This section presents the scenario matrix and provides an overview of the scenarios. The detailed methodology employed in the project (including prioritised drivers, predetermined elements and critical uncertainties) is presented in the appendix.

3.2 The matrix

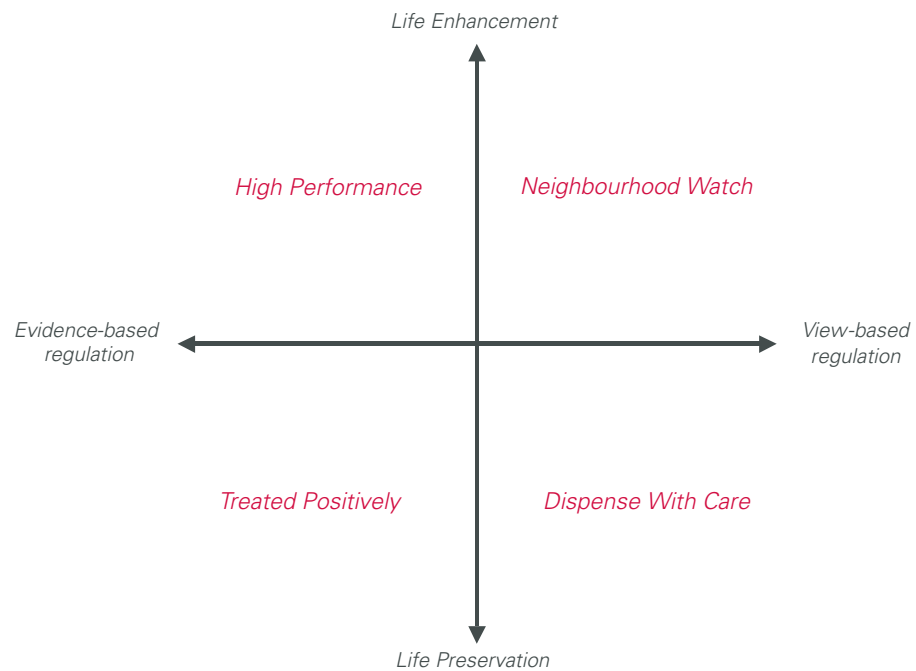
The scenario matrix juxtaposes two axes of uncertainty.

Life enhancement \longleftrightarrow **Life preservation** describes the basis for psychoactive substance use. The axis relates to the views of the individual, community or society. At one extreme, life enhancement involves continuous modification of mood and behaviour. It may also include faster transition to medicalisation and more regulatory, market, or cultural adaptation to non-medical uses. At the other extreme, life preservation includes all psychoactive substance use for therapeutic conditions. The axis provides a certain degree of flexibility about what is classed as a disease, which may change over time.

Evidence-based regulation \longleftrightarrow **View-based regulation** describes the basis for regulation. This axis relates to factors which underlie the regulation and control of drug use by Government. Evidence-based regulation is informed by current scientific knowledge and is considered in light of the harms and benefits to the individual, community and society that are attached to the use of different psychoactive substances. View-based regulation describes an apparently arbitrary, historic, moralistic and non-science-based policy approach to psychoactive substance control. It involves the control of psychoactive substances purely on the basis of their psychoactive properties, rather than taking into account their other effects, whether beneficial, harmful or pleasurable.

The axes combine to create a scenario space with four scenarios (Figure 1):

Figure 1: The scenario matrix



3.3 High Performance

High Performance is a competitive world where people work and play hard. Cognition enhancers have become highly popular and, following a period of unregulated use, are now used openly to enhance most types of work, under strictly controlled conditions that minimise harm. After some initial concerns, UK society is now ready to accept the use of some recreational drugs, but only under equally strict and regulated conditions. People are able to identify their personal vulnerability profile and take responsibility for choosing substances likely to cause least harm. Addiction is seen solely as an illness to be treated, not a behaviour to be punished, and the number of problem drug users in society is falling. There is still, however, a level of hardcore supply and street use that needs to be tackled, both nationally and internationally.

3.4 Neighbourhood Watch

Neighbourhood Watch describes a world where policy decisions are made according to the prevailing social view and where the approach to drug policy changes regularly. Following a period of tolerance, particularly among the professional classes, drug use is now seen as a social ill that must be stamped out. Locally based community partnerships implement policy on drug testing in schools and the workplace. Their approach is punitive, with offenders subject to a 'one strike and you're out' policy. Research into the causes and mechanisms of addiction is not valued and there is little interest or investment in treatment. There are concerns over the sustainability of this approach; some regions are relaxing the rules and the UK's strong focus on domestic policy has resulted in continued failure to tackle the international supply chain.

3.5 Dispense With Care

In *Dispense With Care*, the UK's ageing and demanding population places the NHS under severe strain. The number of conditions that can be treated has increased dramatically and the new generation of 'consumer patients' wants access to all treatments, irrespective of cost. But demand is not matched by a willingness to invest in the public sector and the NHS is forced to cut back on the number of drugs available to patients. This has led to an increase in private sector healthcare. In general, people are well educated about their health, and drug use has declined. Vaccinations against diseases such as Alzheimer's (and against certain forms of addiction) have increased but these are generally only available through the private sector. The NHS has been forced to exclude those requiring treatment due to self-harm.

3.6 Treated Positively

In *Treated Positively*, advances in our understanding of the molecular mechanisms of disease have transformed the nature of treatment and of the pharmaceutical industry. New, smaller, manufacturers use open-source technology to quickly create customised precision treatments that match individual disease profiles and the large pharmaceutical companies' dominance of the market is threatened. Greater understanding of genetic susceptibility to addiction means that individuals are able to select which psychoactive substances to avoid and even manipulate their own vulnerability profile. Cannabis is used therapeutically by the terminally and chronically ill and psychedelic drugs are being considered as therapeutic agents. Illicit drug manufacture – which has also benefited from advances in science – is cheap and sophisticated.

3.7 Comparison chart

Table 1 describes key differences between the scenarios according to:

- the basis of decision making by policy makers, individuals and society
- how psychoactive substances are used and viewed by society
- what is happening to manufacturers
- how society views addiction
- the ethical issues to be addressed.

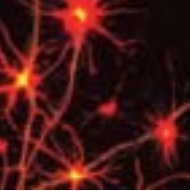


Table 1: Comparison of the scenarios

	High Performance	Neighbourhood Watch	Dispense With Care	Treated Positively
Decision making	Based on scientific knowledge	Based on the prevailing social view	Based on the prevailing social view	Based on scientific knowledge
How psychoactive substances are used	Widespread, sophisticated use to optimise performance. Harm is minimised	Used according to personal cultural context and peer behaviour	General intolerance of psychoactive substances other than for treatment	Widespread acceptance for treatment, but use for recreation or performance enhancement is less readily accepted
Manufacturers	UK firms are strong suppliers; and move into manufacture and supply of cognition enhancers Generics are plentiful. The black market thrives	UK firms are strong suppliers Generics are plentiful Illicit manufacture moves along the international supply chain	UK firms have withdrawn from the development of new medicines for mental health	China and India are key suppliers to private sector Big companies under threat from open-source niche players Illicit production is cheap and sophisticated
Addiction	Not stigmatised Viewed as an illness to be treated	Not tolerated Punitive and criminalising regime	Not tolerated Addicts not criminalised, but excluded from support frameworks.	Not stigmatised Society is increasingly using preventative treatment for those at risk
Ethical issues	Whether to broaden controlled use	Whether the punitive approach is suitable and sustainable	How to deal with the legacy of the socially excluded	Whether to allow widespread interventions to prevent those at risk falling into harm

4 High Performance

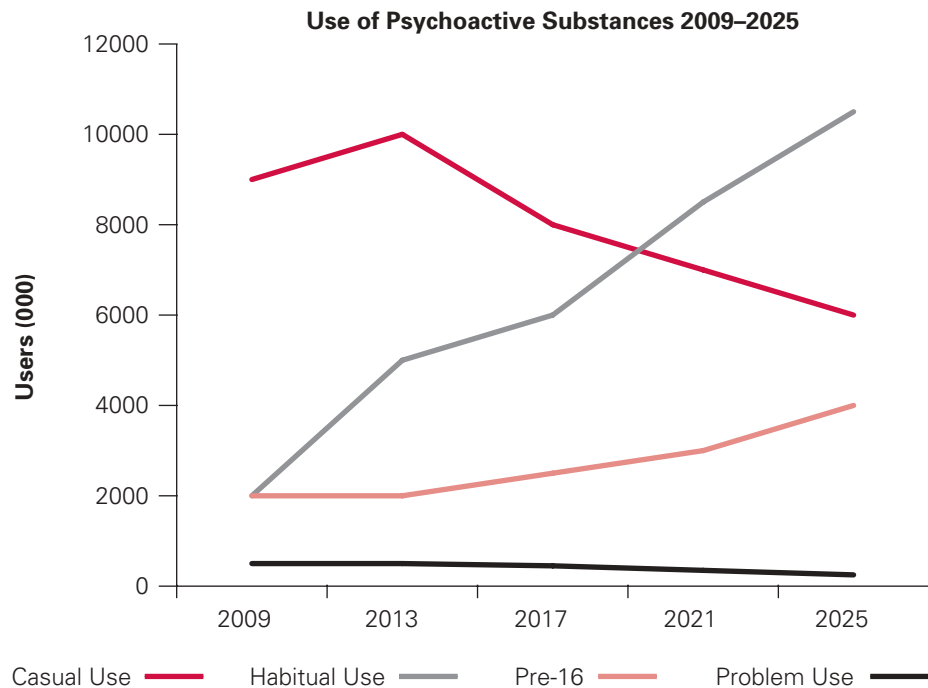
4.1 Context

It is 21 August 2025. The UK is enjoying a period of high economic growth fuelled by innovation, long-term investment in technology and the sustained acquisition of knowledge, which is now pursued as the key source of value for companies and the key source of wealth creation for nations.

The UK is a strong global player in goods, services and (particularly) talent. Many commentators attribute the UK's current prosperity to the constant churn of 'knowledge nomads' – the newly emerged class of elite knowledge workers who roam the globe constantly in search of new challenges and interests and who regard the UK as one of the most progressive societies in which to live and work. The UK remains confident in a world where trade and production are increasingly concentrated in a small number of large multinationals, but it is also aware that its continued success depends on remaining attractive to nomads.

People work and play hard. There is plenty of opportunity for those who want it – most do – and plenty of reward for those who are successful. Consumption is high and conspicuous; the service sector is thriving and the switch to full electronic service delivery (ESD) means that public services are rightly regarded as among the best in the world.

There is, of course, no such thing as a free lunch and the UK's prosperity has a price tag attached. Continuous innovation and the adoption of technology have created many new jobs and industries, but has also destroyed old ones; growth in the service sector has mopped up a lot of unemployment, but the jobs are not always the ones people want; wealth and opportunity have become concentrated in the cities, while rural areas are under threat; and people are ultimately more concerned with their own interests than with those of the wider community.



Source: *Journal of Addictive Behaviour*. Volume 25: August 2025

Responsible use of psychoactive substances – whether for recreation or performance enhancement – is allowed under regulated conditions and these products are sold in licensed premises. Recreational drugs are expensive and the cost is normally borne by consumers directly. Some employers are willing to subsidise cognition and performance enhancers.

There are no global regulatory standards and the UK is flooded with cheap generics and bootleg drugs from countries with less rigorous quality assurance and testing. Some are sold legitimately, but most are imported over the Internet and sold on the street. Many people are still using black-market drugs.

4.2 Historical development: the perspective from 2025

In all the excitement over last week's publication of the UK's latest productivity figures, most people missed the announcement that the number of problem drug users in the UK is continuing to fall steadily. While it was perhaps less newsworthy than the economy's improved performance, it is nevertheless a major achievement and one that should not pass unnoticed. Perhaps the fact that it almost did is a mark of how far the UK has come in the last 25 years.

Even back then, the UK was bucking trends. It continued to enjoy steady economic growth during the first years of the new millennium despite the global recession that affected its neighbours, allies and competitors. In 2003, the average couple was twice as well off as their parents had been a generation before. House prices, home ownership and consumer spending all rose strongly and even the least well-off had access to what appeared to be limitless amounts of credit to fuel their demand for consumption.

15 June 2025

Party leaders hail decline in problem drug use

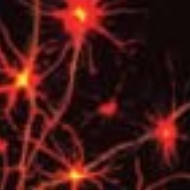
Leaders of all the main political parties last night welcomed the news that problem drug use is continuing to fall. Announcing the results, Donal Moore, chair of the cross-party working group on drug use, praised the Office of Drug Policy and Testing.

Many struggling with work-life balance

It was something of a hard-won battle, however. Many employees were struggling to achieve a work-life balance and had little time or energy for leisure pursuits, community participation or self-improvement; and the rising cost of living led to significant numbers of low-paid workers – many of them in the emergency services and other public sector jobs – moving out of the major towns and cities. There was a prevailing mood of short-termism that left many feeling anxious and dissatisfied. The divorce rate rose as the stress of trying to keep afloat took its toll on families and relationships.

Increased drug use in the middle classes

The social divide that had plagued the UK since the post-war period was still a problem at that time. Until the end of the twentieth century, the incidence of 'problematic drug use' (as heroin use was defined then) was highest among low-income individuals and the socially deprived. However, alcohol and drug use increased dramatically in the middle classes and among the young as social and economic pressures rose. The majority of middle-class users stuck to cannabis and ecstasy, but growing numbers turned to more powerful drugs like cocaine and even heroin. By 2009, 8% of the adult population – 2.5 million individuals – were estimated to be habitual drug users; 30% (9 million) admitted to occasional use and the number of problematic drug users was continuing to rise.



While these levels of use seem low by comparison with today's standards, drug taking in 2009 was still non-certificated and indiscriminate, and users had no way of knowing what long-term harm they were doing to themselves. Moreover, deterrence – the principal basis of public policy at that time – was unable to contain the social harms caused by increasing numbers of problematic users and the aggressive sales techniques of those who were seeking continued growth of a black market worth £7 billion.

**UK prosperity
looking less
assured**

Somewhat perversely, perhaps, the UK's journey out of this tangled web of ethical and social issues began as a result of economic rather than social pressures. By 2010, the UK's future prosperity was looking less assured and although UK output continued to grow (even if, at 1.5% per annum, it remained significantly below the global and European averages) unrestrained consumer credit, declining productivity and unstable IT were creating mounting concern about the long-term health of the economy.

The UK's concerns were not helped by the continuing growth of the Chinese economy, which had confounded those who thought that it would have to mark time while fiscal reform and infrastructure development caught up, its continuing – and mutually beneficial – relationship with India and the renaissance of Japan's economy after a decade of painful economic reform. Suddenly, Asia appeared to be right back in the race and the US in particular was looking over its shoulder with rather less amusement than before.

**Extensive use
of cognitive
enhancers in
emerging
economies**

A key factor in the growth of the Asian economies was the level of foreign direct investment in the region. Growing numbers of UK employees found themselves spending time in Beijing and elsewhere and assimilating the distinctive work culture – which included extensive use of drugs designed to enhance wakefulness and intellectual performance. Use of these substances – locally

Tuesday, 6 September 2011

Beaten by a head?

Li Quon Shing is a charming and affable young man who is saving hard to travel to Europe for the Olympics next year.

Quon, a keen amateur sprinter, has an encyclopaedic knowledge of past medal winners, their times and their race histories. It is a remarkable feat of memory which becomes rather more disconcerting when he demonstrates his equally detailed knowledge – and insightful analysis – of the financial services sector in South

manufactured modifications of second-generation performance enhancers – seemed logical to a workforce made up of sports fanatics who had watched their athletes participate in the drugs 'arms race' of the last three decades and who now believed themselves to be engaged in a similar battle for global economic supremacy.

Performance enhancers start appearing in the UK

Performance enhancers began to appear in the UK around 2011. Most employers were aware of their presence, but none would admit it – the prospect of increased wealth and productivity from an enhanced labour force was too much to resist. The UK pharmaceutical companies spotted the potential and quietly began to look at the science underpinning the new psychoactive enhancers. Equally quietly, they began to share their findings. In 2014, PharmUK (the industry representative body) hosted a series of informal private dinners for business and political leaders to discuss the UK's response to cognition enhancement in the labour force.

Pharmas build a compelling case for controlled use of enhancers

These were landmark events. By concentrating on the economic and scientific arguments – demonstrable improvement in individual, commercial and regional performance and the potential to develop third-generation drugs that offered little or no risk of harm – the drug companies built a compelling case for the controlled and monitored use of cognition enhancers ('cogs') in the workplace. Their commercial scenarios were compelling too, showing (conservatively as it turned out) a £100 billion market with projected annual growth rates of 5%.

The politicians were willing to listen. All sides of the spectrum recognised the need for a fundamental shift away from the increasingly untenable view-based policies that had dominated successive governments' approaches to drug use. Cog users – motivated by ambition and the desire for greater personal performance rather than the pleasures of intoxication – were different from other drug users. The politicians recognised that the introduction of controlled cog use might offer a route to longer-term acceptance of drugs in society.

And, of course, it was clear that the Asian economies were ready to legalise cogs.

Things began to happen following the landslide victory in the 2015 election, fought on the 'five pledges for prosperity' manifesto which included the promise to 'maximise the benefits



from safe use of cognition enhancers and minimise the harms from unsafe use of other psychoactive substances.'

Office of Drug Policy and Testing set up

Having won this mandate, the Government's first step was to set up the Office of Drug Policy and Testing (ODPT) to oversee development and delivery of its promise. Its second was to launch an extensive campaign of public engagement designed to inform and stimulate debate and to address the (still considerable) concerns among some parts of the community that the UK was heading down the road to perdition. Getting the media on board was key but, while they were broadly supportive of controlled use, they were sceptical of the Government's commitment to drive through the reforms and concerned that a half-hearted approach would do more harm than good. Their scepticism was instrumental in the Government securing all-party support and, once this was in place, the media came on side.

Widespread public debate

The business community – and particularly the drug manufacturers – also got involved, supporting a series of town hall meetings across the UK and hosting discussion groups on the Internet. They were passionate advocates of enhancers, arguing that regulated use within a controlled environment was considerably safer than unregulated and unsupervised clandestine use.

Safety at Work Act introduced

This was a vigorous debate which helped shape the legislation and, when the bill allowing controlled use of performance enhancers in safe working environments was passed in 2017, the Government had no concerns over the political viability of its approach. It was, anyway, a gentle introduction. The Act did not allow enhancement in workers with responsibilities for others (drivers, pilots, teachers or doctors, for example) or in vulnerable groups (the young, the old, those genetically predisposed to addiction, for example). By emphasising that customer safety and product liability rested with employers, the Act ensured that safe use in the workplace was a shared responsibility.

22 May 2015

Office of Drug Policy and Testing launches Citizens' Forum

The UK government is launching a nationwide forum to build public understanding of the benefits of controlled use of cognition enhancing drugs.

**Licensed
Premises
(Cannabis) Act
introduced**

Following the successful pilot of the cannabis blood-level tests and the impact study on cognitive enhancement, two key pieces of legislation were announced in the 2021 King's speech: the amendment to the 2017 Safety at Work Act, extending the category of workers allowed to use performance enhancers; and the Licensed Premises (Cannabis) Act which finally became law last year.

May 29 2017

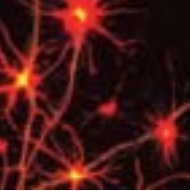
The cogs of industry

Social policy in the early years of this century was dominated by concerns over illicit drug use. Some of those concerns remain today, but things may be about to change now that performance enhancement is an acceptable part of the knowledge professional's tool kit.

Both initiatives are currently being evaluated by the ODPT and we won't know the policy impacts for another couple of years, but the early indications are positive. The biggest concern about licensing cannabis – that certificated users would resist the random blood tests – has not been an issue so far; and efforts to produce a non-invasive test continue. And far from 'staying away from the airlines in droves', passengers profess to feel safer with cog-enhanced crews. The airlines' investment in smart cockpits which won't let pilots fly until they have passed the functional tests has helped and we can expect to see this technology rolled out to other services and consumer products in the next decade – probably with substance testing as well as performance testing.

**Individuals use
predictive
screening to
identify personal
vulnerabilities**

It is not surprising that consumers accept these developments. The civil liberties lobby may still regard predictive screening as an intrusion, but most people regard it as a sophisticated way to identify personal vulnerabilities and to take control of their own behaviour. Although some dangers remain – the misconception that it provides a safe way of choosing cocktails, for instance – its benefit in helping people understand addiction and harm is undisputed. Society has benefited too. It is unlikely that the demise of alcohol would have happened without people having access to clear personalised evidence about the harm it causes.



No one can predict who will win the forthcoming election, but it will make little difference to this agenda at least. All four of the main parties have pledged to continue the reform programme and it is likely that the new Government's legislative programme will widen the range of substances available in licensed premises. It is also likely that calls to lower the legal age for performance enhancers will be resisted. All parties agree that the evidence on potential harm to young plastic brains still supports the current limit.

Addiction regarded solely as an illness to be treated, not a behaviour to be punished

Most importantly, the treatment programme launched this year will remain secure. Perhaps this Government's greatest triumph is that addiction is now seen solely as an illness to be treated, not a behaviour to be punished. Increased understanding of the neurological mechanisms that cause addictive behaviour and the development of combination therapies are proving as effective as the early promise suggested – and the patients themselves have pointed out that making addiction a health issue rather than a criminal one also makes it easier for them to avoid the social situations and peer pressures that has kept them ill. There is every reason to suppose that the number of problem drug users will stay low – and perhaps even reduce further.

There is another benefit of removing drug use from the criminal justice system. The police can now concentrate on the social harms caused by the black market. There is still a level of hardcore supply and use that needs to be tackled, both nationally and internationally. Now that we have chosen to put more of our wealth into healthcare, this must be the next priority.

Hardcore black market remains

Thursday, 21 August 2025

Come along, now!

It's time to clean up our streets

The lives of thousands of residents across Britain are still blighted by drug dealers – despite the rise in licensed premises nationwide.

It may be true that on-street dealing is falling, but the statistics provide little comfort to those on the front line of Britain's war against the dealers.

"They don't even try to be discreet anymore" said one resident. "they just hang about, waiting for

4.3 Summary of historical events

Year	Event
2007	Many struggling with work-life balance
2007	Dramatic increase in drug use among middle classes
2009	2.5 million habitual users
2009	Public policy unable to contain social harm
2009	The UK's future prosperity looking less assured
2010	Extensive use of cognitive enhancers throughout emerging economies
2011	Performance enhancers begin to appear in the UK
2013	Pharmaceutical companies host round-table discussions on future of cognitive enhancers
2015	Office of Drug Policy and Testing set up
2015	Widespread public debate
2017	Safety at Work Act introduced
2019	First cannabis blood-level tests piloted
2021	Licensed Premises (Cannabis) Act passed by Parliament
2021	Safety At Work Act amended to broaden categories of employment
2024	Addiction seen solely as an illness to be cured
2025	Problematic drug use continues to fall



5 Neighbourhood Watch

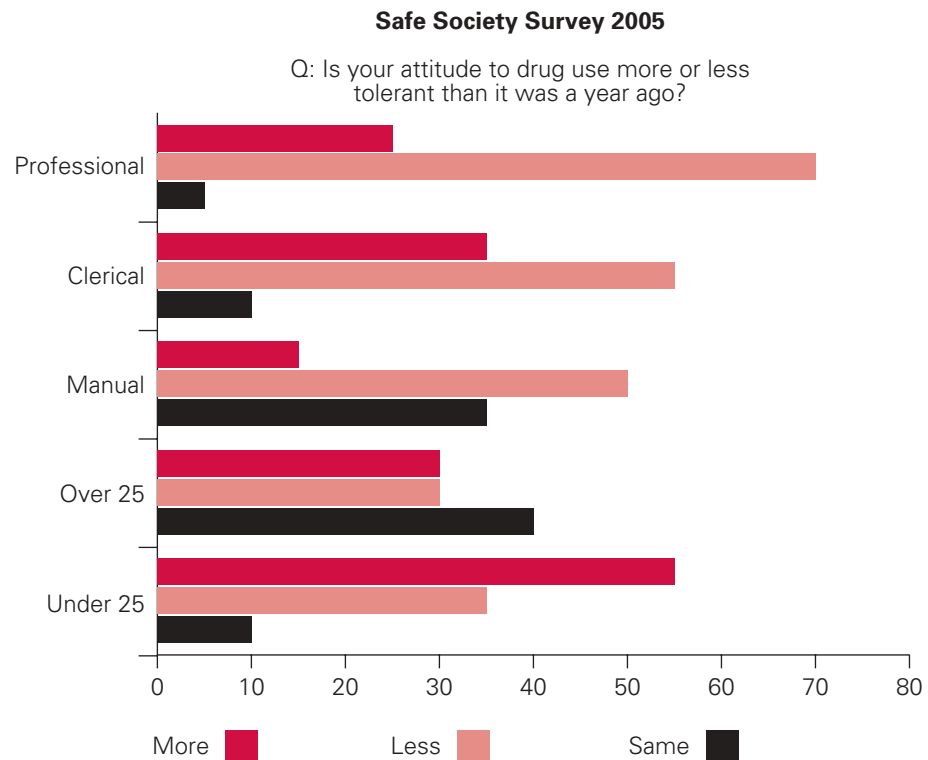
5.1 Context

It is 5 May 2025. The UK is suffering something of an identity crisis and is struggling to find its place in the world (prompting some cynics and foreign observers to point out that, actually, it has ...). Large parts of the UK's administration have been devolved and, while some regions have a greater sense of identity and self-determination, there is growing unease about the consequent loss of social cohesion and the absence of a shared political purpose.

The UK is performing less well economically. Some regions perform better than others. Productivity and profitability generally remain below the European average. Companies are highly cost-conscious. Consumer confidence is low. Economic migration within the UK – towards the more successful regions – is on the increase.

Central government is faced with the challenging task of leading the national response to key strategic issues while continuing to allow local decision making to flourish. This can seem an impossible task – particularly since there is not much money available to fix systemic problems – and it is perhaps no surprise that Government's main priority at the moment is to be seen as a safe pair of hands.

While the decline in political engagement that began at the end of the twentieth century has not yet been reversed, there are some signs that the effort to focus people on their own communities is bearing fruit. It is an important issue and community regeneration is a key challenge for the UK.



People across all strata of society still use psychoactive substances. Consumption of alcohol and tobacco has fallen, but illicit substance use – while in slow decline – is more widespread than it used to be. There has been a strong moral backlash to drug use, however, and communities are working together to tackle the problem. Concerns remain over the effectiveness of the approach in certain regions.

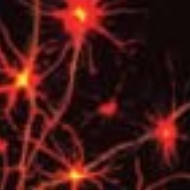
5.2 Historical development: the perspective from 2025

It is rumoured that the UK's 'drugs tsar' – chief executive of the Government's current anti-drugs initiative, Be Safe: Avoid Drugs (BSAD) – will plead for more time when she presents her annual review to the Regional Government Summit later this month. Delegates are, of course, used to a succession of tsars, advocates and champions explaining that 'we're not

May 2–9 2025

Getting it right?

Britain's approach to drug use over the last five years has transformed social attitudes and had a major effect on criminal behaviour. There is much to be pleased about – but there is a lot to be done yet if the country is to maintain the moral high ground and not fall back into a depressing cycle of



quite there yet, but it's definitely going to be much better soon.' This year, however, they are expecting a celebration and are going to be surprised if the rumour mill is right.

The trouble is that we have begun to believe our own hype. While it is undeniably true that the regional business community partnerships (RBCPs) have made a real difference in tackling drug use over the last six years, their punitive approach does not look economically, morally or socially sustainable. This is not a popular message and the tsar's efforts to stimulate the debate do her credit; as does her insistence that the UK must regain its trust in science and bring it back into the policy process. The tsar is a determined advocate for legislative development – but is she right?

Part of the answer to that question lies in the long-run consequences of the constantly changing policy framework – sometimes liberal, sometimes punitive, sometimes both together – caused by the coming and going of successive governments. But to fully understand the tsar's unease about the future, we must look at the shifting cultural context of drug use in the UK over the past 40 years.

**A constantly
changing policy
framework**

The emergence of AIDS in the 1980s resulted in an unprecedented campaign to raise awareness of the public health issues, and focused society on the dangers of injecting drugs. As fears that tens of thousands of injecting users would become HIV positive receded, a countercultural movement that saw the campaign images as icons – rather than warnings – took off. The emergence of 'heroin chic' in the 1990s lifted problematic drug use out of deprived housing estates and established it as a rebellious counterculture for the well-heeled. The growth of individualism and self-fulfilment combined with increasing consumption and declining moral authority to make illicit substance use a regular feature of everyday life for a whole new group in society who were anything but economically and politically marginalised.

**Emergence of
heroin chic**

The number of middle-class users remained relatively low at first – due as much to the high costs and unreliability of supply as to any questions of legality or personal risk – but grew steadily as prices fell. By 2007, the view that illicit psychoactives were a rather more glamorous alternative to the legal ones had firmly taken hold among the professional classes. 'Money, phone, keys,

cocaine' was a common checklist before going to meet friends for a night out.

The growth in middle-class users through the mid- to late noughties was facilitated partly by confusion arising from conflicting policy messages and partly by the new sensibility – reflected in the hit pop song of 2008 and promoted fairly unsubtly through the media – that it was 'trendy (to be tolerant)'. Psychoactive drug use was looked on indulgently as a rite of

passage and any attempt at prohibition was considered to be political suicide. Moreover, the growing publicity given to treatments based on the manipulation of – the M-CRM model of addiction (Memory-Control, Reward, Motivation) was (wilfully?) misinterpreted to mean that addiction was under control. By the time of the 2010 election, society – or the better-off parts of it at least – took the view that the drugs issue had been contained, if not eradicated. The election campaign focused on more urgent matters and parents who were hard pressed to pay school fees encouraged their children to use enhancers to help them pass their exams.

While their middle class cousins were racking up a couple of lines between the tiramisu and double espresso, residents of less well off communities were facing a rather different reality.

Despite continued efforts to improve living standards across the UK, poverty remained entrenched in certain social groups and geographical areas. Despite regional governments' efforts to use education and entrepreneurialism as ways to raise individuals' aspirations and to empower them to make their way out of poverty, crime – with its low start-up costs, high potential returns and no minimum age requirement – offered a quicker and more exciting route. On-street crime rose sharply as groups of teenagers headed off to the wealthier neighbourhoods nearby.

Widespread tolerance of drug use

Prevailing view among the professional classes that drug use has been contained

Tuesday, 17 February 2009

Break the habit!

British scientists learn how to control bad behaviour

A team of top British scientists has figured out how to treat addictive behaviour, holding out the possibility that addiction to drink, drugs, chocolate – and even shopping – could soon be a thing of the past. The brainy boffins have discovered why some of us are more likely than others to slip into bad habits and are now working on ways to treat those of us who do. They have identified



Increasing prevalence in pre-teens and in poorer communities

Increase in problematic drug use

Normalisation across society

Drug culture flourished against this background of perceived – and often real – loss of opportunity. The 2014 Safe Society Survey showed that teenage drinking and smoking were on the increase (bucking the national trend); that the number of young people taking recreational drugs had increased significantly, with one in ten pre-teen children admitting using recreational drugs without parental approval; that the prevalence of strokes, psychosis and other illnesses among long-term cannabis users had increased; and that 'cocktailing' (combining drugs in novel ways to get a new high or to stay awake and functioning following consumption) was on the increase. Worst of all was the level of problematic drug use. It had doubled over the decade, with concomitant and dramatic increases in drug-related crime, infection and death.

In these communities, then, illicit drug taking had become part of everyday life – but unselfconsciously so. Getting together for a drink, a smoke, a toké or a hit was simply what people did when they weren't working. There were no distinctions between 'legal' and 'illegal' substances, since these definitions originated in and related to a world that these particular consumers cared little for and which seemed to care even less for them. Any brushes with authority – and they were rare – were easily shrugged off.

Given these facts, it is shocking to recall the furore that greeted the chair of Safe Society when he suggested, in his 2015 report to the select committee, that drug use had become normalised across society.

While the Safe Society Survey was a pivotal moment in the UK's fight against drugs, it might be described as the warm-up. The main act – which hit the stage in 2017 – was the Spiritual Alliance Against Drugs' seminal book, *The Canute Effect: Losing the Fight Against Drugs*. The book's use of personal stories and family histories to illuminate the statistics was revelation enough.

But it was the introduction of the Alliance's socioeconomic harm model – and, in particular, the interactive version that allowed

2 November 2017

Drug taking is 'normal behaviour' in society today

Frederick Brooke, Chief Executive of Safe Society, has warned that drug use in Britain has become normalised, and many people are now resigned to its constant presence as a social ill.

readers to input their own postcode and see the impact of drug use on their own community – that really shocked people.

**Call to accept
collective
responsibility**

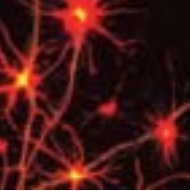
The Canute Effect provided a wake-up call for society. Its central thesis was that the responsibility for the growth in the abuse of illicit substances – which was destroying lives, families and communities throughout the UK – was a collective one. The book was particularly dismissive of science, ranking its 'failure' to contain drug abuse alongside its 'failure' in GM, global warming, cyber crime and intelligent road safety. But it also lambasted civic society for effectively sticking its head in the sand, local governments for failing to work together across regional boundaries, providing suppliers with the oxygen for growth, and the pharmaceutical companies which were continuing to produce psychoactive substances, albeit legally.

The book reserved its greatest contempt, though, for what it scathingly called 'the immoral minority' – those members of the middle classes who should (the book argued) know better than to put their own health at risk and to ignore the real price of consumption: misery on the streets in the UK and funds for the regimes and organisations supporting production in Colombia, Afghanistan and elsewhere. In the final chapter, *A Learnt Habit*, the authors used the harm model to show the impact of parental and sibling drug use on children and, horrifically, what would happen to the UK if just one in ten of the children being encouraged to use cognition enhancers moved on to other drugs.

The Canute Effect provided a voice for non-users, pointing out that they were neither intolerant nor abnormal for being against drugs. On the contrary, it argued, non-users were the moral custodians of the future. The Alliance called on them to stand up and be counted.

**A growing moral
backlash**

They did – in droves – and the tide began to turn. Community leaders across the UK began to mobilise citizens and make representations to the regional authorities. The most successful regions were those that involved locally based business in their plans. Engagement was an obvious choice for many businesses increasingly concerned about the consequences of drug use in their current and future labour forces, but especially for the drug companies, which saw involvement as an essential part of their corporate responsibility and a way to strengthen their reputation.



Mandatory drug testing in the workplace and in schools

When central government set up the Regional Business Community Partnership Fund in 2019, it received bids for matched funding from all regions. The first RBCPs – with boards comprising community leaders, business leaders, law enforcement officers and health professionals, were incorporated in 2020. They immediately began to build acceptance for the new legislation on mandatory testing in the workplace and in schools and to oversee its implementation.

The RCBPs have moved from strength to strength over the past five years. Their biggest impact has been keeping communities informed about and involved in new developments and approaches. The best of them have been highly successful in securing consensus to pilot new zero-tolerance programmes – such as 'one strike and you're out' – by involving citizen panels in the evaluation process. There is real evidence from the 2024 Safe Society Survey that drug use has dropped significantly among the professional classes and is slowing elsewhere.

It does all feel rather good at the moment – but the tsar is right to be concerned about the sustainability of the UK's current regulatory framework. Moral approaches work best when they are in tune with the morality of the day, and there have been some other – and more disturbing – rumours circulating that some regions might once again be prepared to turn a blind eye to certain types of recreational drug use, as the price for attracting and retaining certain types of wealth creators. If that happens, the whole pack of cards will fall.

Doubts over sustainability of the approach

28 April 2019

New partnerships to tackle drugs

The Government has announced that it will fund a number of Regional Business Community Partnerships (RBCPs) to tackle drugs in their own areas. The Partnerships will represent all parts of the community and will have the powers needed to make and implement local policy. They will be encouraged to focus on school and workplace policing initially, but will have the freedom to move into any aspect of control that their Boards

Science on the margins

The Canute Effect's greatest legacy is that it did, indeed, turn the tide – but by playing the morality card and castigating science for its 'failures', it unwittingly contributed to the continuing erosion of trust in science.

As a result, much of the existing research into the causes and treatment of drug use has been sidelined; and very little new work has been funded in the last decade. The tsar is right to want to bring science back into the policy and regulatory process. If she fails to do so, there is a real danger that the UK's policy approach will return to the liberal/punitive cycle.

26 June 2025

The Drugs Issue

- Regaining the moral ground.
- Treating addicts: Who cares?
- Controlling the control centre.
- Cause and effect.

Continuing need to tackle the international supply chain

There is another factor as well. The UK's continuing struggle to get its own house in order means that we have made little or no effort to tackle the international supply chain that continues to operate effectively, delivering huge quantities of drugs here and elsewhere. We need to pay more attention to finding effective ways of working with our international partners to shut the supply chain down.

There is still, therefore, a lot for the tsar to do. Let's hope delegates at the Summit recognise that.



5.3 Summary of historical events

Year	Event
2007	Illicit psychoactive use firmly taken hold of the professional classes
2008	Prevailing sensibility of tolerance to drug use
2010	Better-off parts of society perceive that drug use has been contained
2010	Drug culture is flourishing in poorer communities
2014	Increasing prevalence of drug use in pre-teens
2014	Increase in problematic drug use
2015	Drug use has become normalised across society
2017	Spiritual Alliance Against Drugs publish <i>The Canute Effect: Losing the Fight Against Drugs</i>
2020	First Regional Community Business Partnerships incorporated
2020	Introduction of mandatory testing in the workplace and schools
2024	Safe Society Survey shows a drop in casual drug use
2025	Drugs tsar pleads for more time

6 Dispense With Care

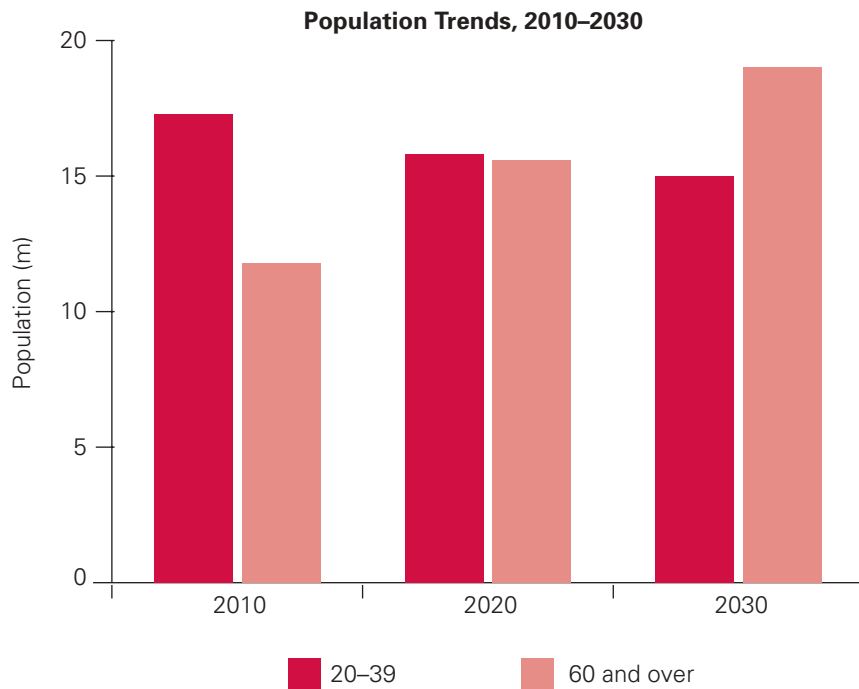
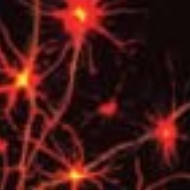
6.1 Context

It is 20 July 2025. While the UK economy can hardly be described as being in difficulty, there is no room for complacency. The UK, in common with most regions of Europe, is trying to simultaneously ride out and correct the 'demographic imbalance' which has seen the worker:pensioner ratio fall dramatically over the last decade: 30% of the population now is over 60; 10% is over 70.

The Government has few options. Its efforts to attract young overseas workers and their families to the UK with the offer of jobs, housing, quality of life and opportunity has had limited success due to the highly competitive nature of the marketplace – and the UK's reputation for not welcoming migrants. Another plank of its strategy, investing in UK plc's human resources by encouraging people to stay fit and healthy, has been more successful, but is not itself enough to rectify the situation.

Consequently, the UK is a country stretched to capacity. Labour and skills shortages, coupled with inadequate pension arrangements, mean that many people work past the statutory retirement age (now set at 67), but not in sufficient numbers to meet the increasing costs of healthcare and other public services. Personal taxation is higher now than at any time in the last 30 years.

The state remains the main provider of healthcare, but spiralling costs – caused by the ageing population and the growing number of treatments available – have meant a decline in service in recent years. Those who can afford to are moving to the private sector, but the majority don't have the luxury of this option. Grey campaigners – a motivated, skilled and powerful lobby – have brought care for the elderly to the forefront of the political agenda.



Government has acknowledged the need to provide better healthcare, and the cost of treating 'self-inflicted' illness has been shifted to the individual. Those who suffer problems as a direct result of misusing psychoactive substances (including legally produced mood enhancers and cognition enhancers) have to pay for their own healthcare. Some take out specialist medical insurance.

6.2 Historical development: the perspective from 2025

ELZ's share price rose today following the CEO's announcement that the company is to begin full-scale production of ADVantage, the vaccine for treating Alzheimer's Disease. 'Vaccines have long been a key public health tool for preventing bacterial infections,' he told delegates and press at the launch event in Beijing this week, 'but this will be the first product that prevents the onset of a non-infectious disease.' ADVantage is good news for ELZ and for millions of patients around the world, and also for the pharmaceutical sector at large, which has been needing a bit of a boost. But unfortunately for those in the UK who suffer from or are predisposed to Alzheimer's, cost considerations mean that ADVantage won't be available to everyone until after the statutory probationary period required to test value for money. Given that there is little doubt it will pass and that the funding problem will

have to be addressed anyway, there is a strong argument for probation to be relaxed, allowing ADVantage to be introduced more quickly.

**Competing needs
in healthcare**

ADVantage has once again focused public attention on the difficulties of choosing between competing needs and treatments in healthcare. The usual explanation for these difficulties is that the UK is a victim of its own – and others' – success in medical advancement. The real story is rather more complicated, and is dominated by increasing patient expectations and the demographic shift that has taken place in the UK over the past 20 years.

When the National Health Service was established in 1948, it offered to provide citizens with 'all medical, dental and nursing care. Everyone – rich or poor, man, woman or child – can use it, or any part of it. There are no charges, except for a few special items.' It was a wonderful, heroic and reckless promise that people took up with such enthusiasm that spending in the first nine months – expected to be £198 million – actually hit £276 million.

**A materialistic
and demanding
society**

Over the following 50 years, any notions that this initial overspend was the legacy of war, rationing and a backlog of untreated cases were quickly dispelled. The funding required to fulfill that initial promise rose in step with medical advancement and by the time the NHS reached its 50th birthday, people were so used to having health services on tap that they took it for granted. In fact, people were so used to having everything on tap that consumption had reached astonishing levels. Two decades of (more or less) sustained world economic growth had created a materialistic and demanding society full of consumers seeking instant fulfillment. The market satisfied their every need and they expected public services to do the same.

21 July 2025

ELZ gains ADVantage as shares soar

Share prices rose steeply overnight as ELZ, the Chinese pharmaceutical giant, launched its long-awaited vaccine against Alzheimer's Disease yesterday. ADVantage is the latest product to appear from ELZ's highly innovative research laboratories. ELZ has defied the cost of ADVantage and it appears unlikely that it will have significant



Consumer patients emerge as a force for change

Consumer patients, as they were dubbed, were certainly a force for change over the first decade of the twenty-first century – though whether for good or ill remains hotly contested, even today. Consumer patients were very focused on getting what they wanted and constantly sought improvements in care, either for themselves at the point of service, or for society as a whole through political debate in the media. The view that came to dominate public opinion was that the individual's right to health, like his or her right to goods and services, should be met at all costs.

Poor public understanding of choices in health policy

'All costs' rose considerably throughout the decade. While expert commentators argued that a public health system needs sophisticated and principled consumers if it is to develop and provide high-quality services, the 'consumer patient' revolution was blighted by the fact that consumers were not as sophisticated as they thought they were. Although generally well informed about health matters and the latest medical developments, they had a poor understanding of risk, public health issues and how to evaluate the choices needed to run a public health service. They were also particularly susceptible to every latest health scare and, for a while, resource allocation in the NHS began to look dangerously like a ping pong ball – bouncing here, there and everywhere in response to demand.

Some drugs too expensive for the NHS

Demand grew fastest in the steadily growing elderly population. The over-65s were pretty healthy mechanically, but by 2010, one million of them – one in twenty – suffered from dementia. The number rose to one in five in those over 80. Alzheimer's, the most common dementia, accounted for nearly 500,000 sufferers. Treatments were available, but their efficacy

was disputed and the cost was high – over £500 million a year for Alzheimer's alone. The NHS tried to withdraw some of the most expensive and disputed drugs from the market, but found itself at the centre of a huge political storm. This, remember, was the SKler generation ('spending the kids' inheritance'), having fun after a lifetime of toil. They redefined 'senior' citizens as a moral

Wednesday 19 January 2011

How dare they?

Patients denied 'expensive' drugs

Five patients suffering from Alzheimer's Disease have been told they will not receive their medication any longer because it is too expensive.

Sarah Andrews, who cares full time for her father, Jack, 75, was told by her local health authority that he can no longer have the drugs that helped him and that he must take an alternative, cheaper drug.

"He used to have this drug and it was hopeless," Sarah told us

and political force, using their considerable energy, wealth and time to demand that the state look after them and their parents. The treatments remained in place for the time being.

**Fivefold increase
in prescriptions
for behaviour-
controlling drugs**

The younger generation, meanwhile, were pursuing their own agenda. For a variety of reasons – which ranged from the view that money can buy anything to the view that the state should provide for everybody – it wanted treatment for an increasing number of conditions which had once been considered 'social' or 'psychological'. As consumers used to getting what they wanted, they found it intolerable that they should feel stress, have cravings for chocolate, cigarettes or cannabis, or that their children should not be vaccinated against the threat of behavioural or substance addiction. The number of prescriptions for behaviour-controlling drugs increased fivefold between 2007 and 2012, without patients properly understanding the possible harms they were being exposed to and before the medical profession could establish appropriate levels of prescribing.

If these rising demands had been backed up by concomitant levels of investment, the 'consumer patient' phenomenon might have created a virtuous spiral of improvement. But instead, focused as always on their own interests rather than the collective good, the NHS's 'shareholders' constantly voted for the parties of low taxation. This was not a sustainable position. By 2014, many commentators were concerned that the NHS was on the brink of terminal decline. The electorate took the view that the media was crying wolf – and kept up the pressure.

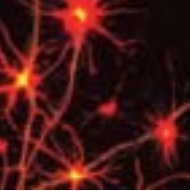
**Low investment
in NHS brings it
to the brink of
terminal decline**

The surge in demand caused by the 2015 flu pandemic nearly did push the NHS over the brink. Simultaneously its finest hour and its worst, the pandemic served to remind society that you get what you pay for. It also, sadly, reminded them what was truly important. All the previously warring communities were affected to some degree.

June 21-27 2012

Welfare in a state

It has always been true that you get what you pay for. Most of us recognise this fact, which is why we generally tend to spend as much as we can possibly afford when buying anything new – whether it be a tennis racquet or a house. The rule holds for just about anything – except healthcare, where we are most certainly not



Once the pandemic was over, society began to take a hard look at its priorities. The soul-searching and breast-beating which filled the media long afterwards marked a shift away from the culture of consumption and towards a more balanced, ecological approach to living. People accepted the need to invest more in society and in the public infrastructure needed to maintain and care for it.

People realise the need to take more direct responsibility for health

They also recognised the need to take more direct responsibility for their own health. They called for – and paid attention to – better information on diet, exercise and general health. There was a renewal of interest in simple, freshly prepared food. The UK lost its crown as the fast-food king of Europe and the nation got off the couch and began to swim, cycle and play football again.

The use of illicit drugs declined in the young and middle-aged middle classes. While this was partly caused by abstinence – the shift towards a healthier culture meant that some people were persuaded to 'go for a run instead of popping a pill' – much of it was due to consumers switching substance. Continued ambiguity about the link between depression, psychosis and the long-term use of drugs such as cannabis and ecstasy persuaded floating users to switch to alcohol – which they perceived to be less harmful in light of its legal status. There was a consequent increase in antisocial behaviour due to drinking but any concerns were overridden by a decline in drug-related crime. Tobacco consumption also increased slightly, most significantly among the young.

Increase in private sector healthcare

The shift towards greater personal responsibility for healthcare was not just restricted to behaviour. By 2020, over one-third of the UK population – and one in four of those over 60 – had taken out supplementary private medical insurance. Patients mainly used the private sector for health 'events' such as birth, operations or long-term care, and stayed within the NHS for day-to-day treatment.

These improvements were not enough to offset the legacy of years (some said decades) of under-investment in the health sector, so no one was surprised when COPE – the Centre of Practice Excellence – introduced stringent probationary procedures in 2021 to reduce the cost and number of new drugs made available through the NHS. UK manufacturers, already under pressure to reduce costs, were forced to consolidate

**UK
manufacturers
withdraw from
development of
new medicines
for mental health**

product ranges and concentrate on lower-risk, higher-value drugs. Development of new medicines for mental health stopped entirely, leaving the market for new treatment of central nervous system disease open to less regulated producers in China and India. Some consumers chose to access producers directly through unregulated routes, such as the Internet.

COPE's reduction programme has clear consequences for the treatment of dementia and a vast array of medicalised disorders, but the most significant impact is likely to be on the new generation of drugs being developed to treat addiction and tackle vulnerability. Not only are they unlikely to get onto COPE's register, but the prevailing view now is that addiction is a self-imposed illness that individuals should deal with through the private rather than public sector. The fact that this consigns a large swathe of users to a future they prefer not to contemplate is a regrettable but unavoidable consequence.

**Expansion of the
private sector**

The private sector providers are certainly appraising their options. They have already picked up on concerns about addiction and vulnerability and have cleverly (cynically?) targeted worried parents by offering vaccinations against the common drugs of addiction (cocaine, heroine, nicotine and cannabis – but not as yet, alcohol) in children's formulations. The Government's view that there is no evidence to suggest long-term harm will be good enough to offset any lingering doubts.

As for the over-65s, they are philosophical – mellow, even – about the changes of the last decade. They have been able to make alternative arrangements for many of the ailments of old age, but dementia is one condition that still relies on big pharma. Big pharma perhaps relies on it too, knowing that the private healthcare market is not going to be sufficient to sustain them. There may be no precedent for COPE to relax its probation protocols for ADVantage, but it doesn't really need one. We could all be winners.

30 June 2025

NHS 'no longer able to help those who don't help themselves'

The Minister for Health announces that, due to rising healthcare costs, certain illnesses resulting from 'self-harm' can no longer be treated on the NHS.



6.3 Summary of historical events

Year	Event
2005	Emergence of 'consumer patient' phenomenon
2008	Poor public understanding of choices in health policy
2010	Dementia sufferers approach 1 million in the UK
2011	SKler generation become a strong political force
2012	Fivefold increase in prescription of behaviour-controlling drugs
2014	NHS on brink of terminal decline
2015	Flu pandemic
2016	Shift away from the culture of consumption towards a more balanced, ecological approach to living
2017	Decline in illicit substance use with associated rise in alcohol and tobacco use
2020	One-third of UK population has private medical insurance
2021	COPE introduces new probationary procedures to help with prescription drug reduction
2023	UK pharmaceutical sector stops development of new medicines for mental health
2024	Private health providers diversify
2025	Full-scale production of ADVantage, a vaccine for Alzheimer's Disease

7 Treated Positively

7.1 Context

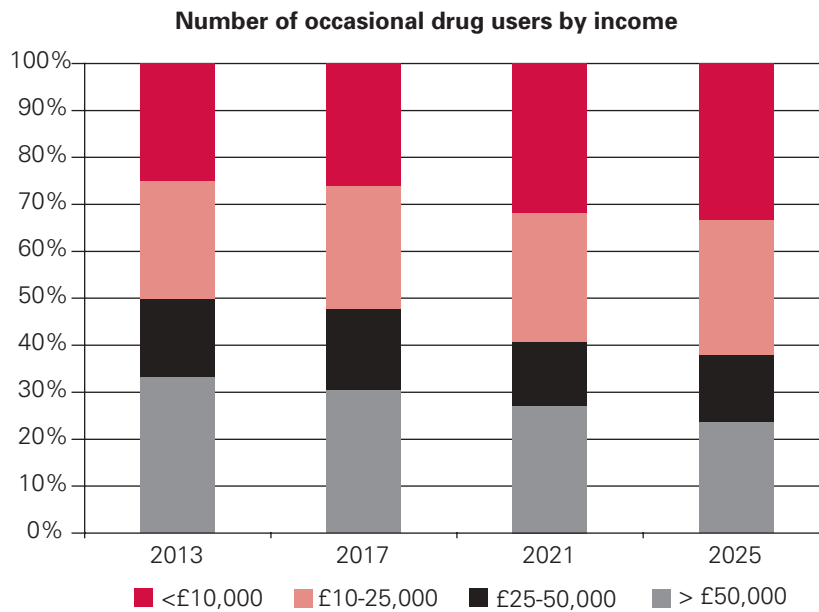
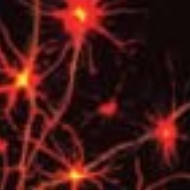
It is 17 March 2025. The UK is facing a number of challenging social and political issues including global warming, terrorism and global equity, and the Government is as concerned with foreign policy as it is with domestic matters.

The UK's citizens are concerned about these issues too and have adopted the values and principles that underpin the need to tackle them. Society places greater importance on lifestyle, on taking care of one's self and one's family and on developing community. Consumerism has become less important and people are willing to make the investment necessary to fund a higher, more equitable quality of life.

Economic growth is still market-driven, but it has been slower than in the past. There have been higher levels of taxation and investment. The regulatory regime encourages wealth distribution through fair trade. Tariffs are negotiated through a constant and dynamic process.

There is a general shift towards smaller businesses. This reflects the benefits of smaller, nimbler structures rather than any particular view that big capitalism is bad.

Increased understanding of the harm that drug users inflict on themselves, their families, their communities and society drives policy. The approach has been particularly successful in well-educated and middle-class families. It is, however, regarded with suspicion by the less well-educated and they are less willing to seek help. Consequently, there is concern that they are in danger of excluding themselves from treatment.



The UK is an acknowledged leader in addiction treatment, but is still frustrated by its own (and the international community's) failure to tackle supply – a failure which continues to cause tension between nation states.

7.2 Historical development: the perspective from 2025

The Medicines Review Commissioner today launched a robust defence of his decision that psychedelic drugs should not be used in the treatment of conditions such as alcoholism, depression and post-traumatic stress disorder. 'The latest research on the efficacy of psychedelics on these conditions is inconclusive,' he said, adding, 'I am not, however, closing the door on their use in the future.'

The ruling has disappointed a number of pharmaceutical companies which were hoping for a more favourable outcome, but they have taken his remarks to mean that the next review will allow psychedelics to be used, at least for treating depression. This will probably

17 March 2025

Psychedelics: Case Not Proven

The Medicines Review Commission's decision to refuse a licence for psychedelic drug use in treating depression and other illnesses is a disappointment. It means that a great many users will need to stay outside the law for the present time.

be enough to keep them happy in the meantime – alcoholism is a shrinking market anyway and using psychedelics to treat stress disorders is still fraught with ethical difficulties.

The Commissioner was also at pains to emphasise that his ruling is for the immediate future and that rehabilitation of psychedelics is not being blocked. He simply wishes to ensure that the evidence is in place before making his recommendation one way or another.

Science was somewhat in the doldrums in the early noughties, poorly perceived, poorly valued and mistrusted by large parts of society. People laboured under two general misapprehensions about scientific endeavour: firstly, that it was founded on the discovery of absolute and incontrovertible truths and, secondly, that it could fix anything. This led to unrealistic expectations, and whenever a crisis or health scare arose, people wanted to know what was going to be done about it, by when, why the situation had been allowed to arise in the first place and who was to blame. Any delays, or attempts to explain why something couldn't be done immediately were interpreted as procrastination or evasion.

Poor public perception of science

Scientists' efforts to make science more accessible – by engaging in public debate about the interpretation of data and the ethics and impact of new discoveries – were generally misrepresented by a media which sought 'the answers' and which tended towards sensationalist rather than measured reporting. Wilfully or otherwise, they presented differences of opinion as being politically motivated, or as proof of some vested interest. It didn't help that politicians were quick to pick up the data and arguments that suited their purposes and quick to discard those that didn't.

Major ethical dilemmas

Life scientists had a particularly trying time, caught up in ethical issues such as cloning, GM food and extended longevity, and decried for playing God or for putting profit before people. It is a happy irony, therefore, that they were mainly responsible for the sea change in society's attitude that began in 2007 with the unravelling of the basic molecular biology of cancer and continued with the subsequent development of today's array of genetically based precision treatments.

Possibility of genetically based precision treatments



The cultural and political reverberations of these developments were profound. This was still the era of so-called 'blockbuster' drugs that were handed out to all patients, but which offered different levels of efficacy and variable, sometimes extreme, side-effects. The Government's first challenge, therefore, was to understand the regulatory and economic implications for the drugs industry of precision treatments for cancer. The second was to work out the cost implications to the health service.

1 October 2010

End of the blockbuster?

- Targeted Treatments.
- Mass Profiling?

Recommendation that addiction be understood at the molecular and genetic level

The Medicines Review Commission, set up in 2010, was charged with identifying the issues and making policy recommendations to the Prime Minister. The Commission was encouraged to interpret its brief widely and it quickly began to examine the feasibility of extending the range of illnesses understood at the molecular and genetic level. One of its first recommendations was that the Government increase funding in a number of areas, including addiction.

The Commission also began to look at some wider issues of patient care and, particularly, the use of cannabinoids to treat distress in terminally ill patients. Cannabis had been used by cancer sufferers and other seriously ill patients to alleviate pain and distress for many years. Patients were resigned to being classed as criminals and, while not happy about the situation, generally had more pressing issues to worry about. Many of them, however, became reluctant causes célèbres (some said pawns) as they were drawn into highly politicised debates on legalisation that did little to advance society's understanding of the moral, sociological or scientific issues involved. The Commission sought to move the debate on by introducing some rational analysis and exploding some of the myths put forward by both sides.

The UK was not alone in wrestling with this dilemma and the debate certainly moved on when the US decided to legalise cannabis treatment for the terminally ill. America's hard-line stance on cannabis had been weakening for some time, due in part to the growing number of states allowing medical marijuana use in defiance of federal law. More significantly, though, its

***US and UK
legalise cannabis
treatment for the
terminally ill***

longstanding position that abstinence should be promoted at all costs and that initiatives such as needle exchange promoted drug use and blood-borne disease became increasingly untenable in light of growing evidence to the contrary. When Europe finally lost patience with US intransigence, it used the United Nations to negotiate a shift in position as its price for joining the global coalition. The rest, as they say, is history. The US legislation was passed in 2013 and the UK followed a year later with the Cannabinoid Act.

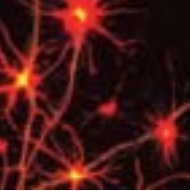
***Effective
collaboration
between
academia and
industry***

As in the US, cannabis-based treatment was initially limited to the terminally ill. Although the 2018 review of the act widened use to all cancer patients in chemotherapy and to patients with long-term degenerative illnesses such as multiple sclerosis, it resisted calls for more general release, noting that prescription for more general ailments relied on subjective judgements by GPs that were open to abuse by unscrupulous patients. Aside from the moral issues involved, the Commission remained concerned to protect the vulnerable, particularly young users and those with depression, from the as yet unproven effects of long-term cannabis use.

These concerns prompted the Commission to recommend that UK research concentrate on the molecular mechanisms of addiction. The Brain Imaging Institute, a joint venture between Government, academia and industry, was set up in 2012 to build this understanding and to test new approaches to treatment. The Institute used new fluorescent markers to identify which areas of the brain were involved in addiction by observing where and how certain molecules acted. The collaborative approach was powerful and quickly led to advances in the understanding of addiction and the effects of psychoactive substances. Working together through the Institute, academia and industry were able to rapidly develop and test the efficacy of new agents designed for precision treatment.

***Possibility
of mass screening
for susceptibility
to addiction***

One unintended spin-off from the Institute's work was the development of a vulnerability test which combined genetic and imaging data to suggest susceptibility to addiction. The test was trialled in 2017 with some success and, although it remains a costly and low-volume option, research is continuing into the benefits of making it more widely available. There are hopes, too, that mass screening will allow the prediction of sensitivity to drugs and quantify the risks of dangerous drug interactions. There remains, though, a question about how acceptable this will be to



Open source begins to change the structure of the pharmaceutical industry

a society of individuals who still retain the right to their own genetic information.

By 2020, the shape of the new pharmaceutical sector was beginning to emerge. Although big drug companies still dominated the market, there was a growing number of low-cost specialist manufacturers using 'open source' – collaborative knowledge-based systems that use pharmacogenetics and other research data to create new precision treatments. Open source remains an exciting development in the industry today, increasingly allowing small and micro manufacturers to quickly create customised treatments to match individual disease profiles. Many of the incumbents dismiss it, but no one really believes that there is any future in the fortress approach to in-house development that sustained blockbuster drugs.

High levels of innovation in illicit drug manufacture

Open source is also an exciting development for illicit drug manufacturers. There are signs that the next generation of illicit substances will also be precision drugs, targeted at the individual's brain's reward system. The sudden appearance of 'brainbursts' in 2022 shows how sophisticated illicit manufacturing processes have become. Precision illicit offers high returns – more intense effects, cheaper to make, easier to cut – and users appear to be willing to try anything once.

Indeed, the past decade's efforts to understand addiction and identify precision treatments have not been matched by investment in tackling the problem on the street. Education, and increased awareness of the health (rather than moral) dangers of taking psychoactive substances mean that some people think carefully about consuming recreational or performance-enhancing drugs. But the evidence suggests that the less well-off and the most vulnerable are still generally unaware of the potential risks.

Friday 21 September 2018

Government denies drug testing plans

New government-funded research means that doctors will soon be able to test everyone for drug addiction.

The test – which has already been trialled – uses DNA data and brain imaging to work out whether someone is likely to take drugs or not. Sarah Smith, Director of Privacy, claimed that government plans to test everyone are illegal – but a spokesman for the Department of Information said that there were no such plans and that the tests

Less well-off and most vulnerable are still taking illicit substances

The combination of new research with significant advances in clinical and experimental psychology, particularly in the management of behavioural addiction and the neuropsychological processes involved in relapse, has created a multidisciplinary approach to treatment that is highly effective. The simple fact remains, however, that the supply of patients is showing no sign of drying up.

Society may have resolved some of the ethical dilemmas of 20 years ago, but new ones have emerged to take their place. Open source, with all its potential benefits, requires regulation.

The development of new pharmacogenetic and pharmacogenomic tools offers the possibility of genetic modification to treat or reduce the risk of addiction, whether voluntarily or not. Children, too, could be vaccinated against addiction. Society will have to address these issues sooner rather than later and it is likely that the Commission will launch the debate soon.

30 June 2025

NHS 'no longer able to help those who don't help themselves'

The Minister for Health announces that, due to rising healthcare costs, certain illnesses resulting from 'self-harm' can no longer be treated on the NHS.

New ethical dilemmas

Meanwhile, the Commission needs to look more closely at the research on psychedelics. The scientific evidence for psychedelics' efficacy as therapeutic agents is compelling, but there remains the wider concern that they are still too closely associated with leisure use. The 2023 review of the Cannabinoid Act concluded that cannabis remains open to the dangers of abuse and did not widen use. The same argument applies to psychedelics and, at a time when society needs to revisit the balance between treatment, research and the fight against illicit use, their introduction might just be a step too far.



7.3 Summary of historical events

Year	Event
2007	Molecular biology of cancer is unravelled
2010	Medicines Review Commission set up
2012	Brain Imaging Institute set up
2013	US legalises cannabis treatment for the terminally ill
2014	UK legalises cannabis treatment for the terminally ill
2017	First trial of vulnerability testing
2018	Review of Cannabinoid Act widens use to treatment of chemotherapy and the seriously ill
2020	Open source begins to change the structure of the pharmaceutical industry
2022	Illicit manufacturers move towards precision drugs
2023	Illicit drug use remains a problem
2023	Review of Cannabinoid Act maintains use but doesn't widen it
2024	Ethical dilemmas emerge around regulation and treatment and control of addiction
2025	Medical Review Commissioner announces that the evidence for introducing psychedelics is not conclusive

8 Working with the Scenarios

8.1 Introduction

This section of the report offers some suggestions for how to work with the scenarios. The approaches described here are based on those used in other Foresight projects (principally the Cyber Trust and Crime Prevention project) and in other public sector scenario projects.

The list is not comprehensive, but does offer some insights into how to use the scenarios to inform strategy. The approaches described here work best in facilitated workshop sessions with upwards of 12 participants. Typically, they require one full day, although it is possible to hold productive conversations with fewer people and, if required, in less time.

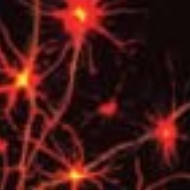
Three approaches are described here. None of them suggest that those involved identify the scenario they want to happen and then identify what to do to ensure that it does. Mainly that is because the scenarios describe possibilities rather than predict outcomes. The reality is that the future will contain elements of all four scenarios. The uncertainty is which elements – and, consequently, which challenges – will dominate.

8.2 Gaming

The basic approach to gaming involves exploring the scenarios from the perspective of a number of different stakeholders and then using the futures perspective to devise recommendations for the present.

A typical gaming workshop can be structured in six steps:

- **Step 1:** Carry out a SWOT (strengths, weaknesses, opportunities, threats) analysis of the first scenario from the perspective of one of (say) three stakeholders (Government, citizens, industry, law enforcers, illegal manufacturers and users are all suitable candidates in the present case).



- **Step 2:** Use the SWOT discussion to determine the extent to which each stakeholder likes living and working in the scenario and identify what they want Government to do to maintain or improve their level of satisfaction.
- **Step 3:** Step out of role and – imagining that the scenario is an accurate representation of the future – make a number of recommendations for current policy. These recommendations should reinforce the elements of the scenario which participants believe to be beneficial to the UK and should address those elements which are likely to be less beneficial.
- **Step 4:** Consider the risks to Government (or other key actors) in pursuing the policy recommendations made in Step 3. Develop a strategy for managing risk.
- **Step 5:** Repeat steps 1–4 for the other three scenarios. An alternative approach is to work in parallel across the scenarios.
- **Step 6:** Compare the results of the different scenario discussions to identify robust policy challenges, those which appear in all or most of the scenarios, and scenario-specific challenges.

Gaming workshops offer a rich perspective on the policy challenges facing Government and other actors. The outputs from gaming workshops generally highlights a number of significant policy challenges and risk issues that need to be addressed in the near future.

8.3 Windtunnelling

'Windtunnelling' describes the process where the scenarios are used to test the robustness of a particular policy or strategy under development.

A typical windtunnelling workshop can be structured in six steps:

- **Step 1:** Agree the wording, purpose and desired outcomes of the policy or strategy.
- **Step 2:** Carry out a SWOT analysis of each scenario from the perspective of one of (say) three stakeholders (Government, citizens, industry, law enforcers, illegal manufacturers, or users are all suitable candidates in the present case).
- **Step 3:** Identify the factors supporting – and barriers holding back – successful implementation of the policy or strategy in each scenario.

- **Step 4:** Clarify whether the policy or strategy is robust, redundant, or in need of modification in each scenario.
- **Step 5:** Agree the main steps required to deliver the policy or strategy in each scenario.
- **Step 6:** Discuss which scenario is closest to current reality and which scenario is closest to the 'official' future – and use this discussion to draw together the discussion from the earlier steps in order to identify what can be done to deliver the policy or strategy now, what needs further analysis and testing, and what – if any – further research needs to be carried out.

8.4 Reverse engineering

Reverse engineering is a process of deconstructing the scenarios, using similar techniques to the ones used to develop them, to identify future events which require a policy or strategic response.

A typical reverse engineering workshop can be structured in five steps:

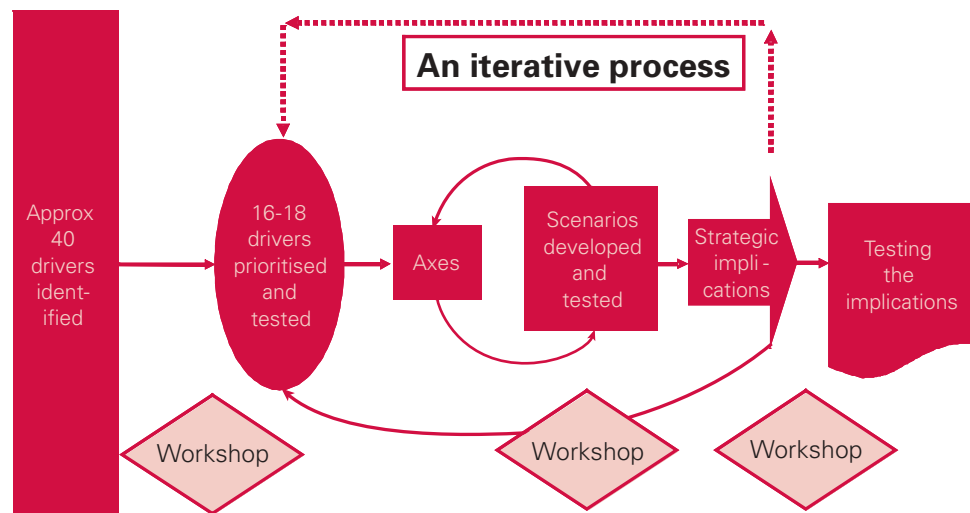
- **Step 1:** Discuss the benefits and disbenefits of a given scenario.
- **Step 2:** Identify trends and events which need to happen for the scenario to occur (some of these events are embedded in the narrative, but the group should identify more).
- **Step 3:** Map trends and events on a 2x2 matrix, according to whether they are certain or uncertain and whether they will have a high or low impact on a given policy area or actor.
- **Step 4:** For high-impact events that are certain to occur, ask the group to identify whether:
 - the events will occur in the short, medium or long term
 - whether the impact is positive or negative
 - what the response should be.
- **Step 5:** Repeat across all scenarios.
- Reverse engineering exercises use the scenarios to identify opportunities and threats facing the organisation in the short, medium or long term. They are a powerful and productive way of setting a forward agenda for action.

Appendix: Methodology

Introduction

Henley Centre used a three-stage process for this project, consisting of driver assessment, scenario development and scenario testing. This approach is based on current thinking about how organisations learn. Stakeholders are involved from the first stage of the process – reviewing the drivers – through to the development of the scenarios and their implications (see Figure 2).

Figure 2: Project Process



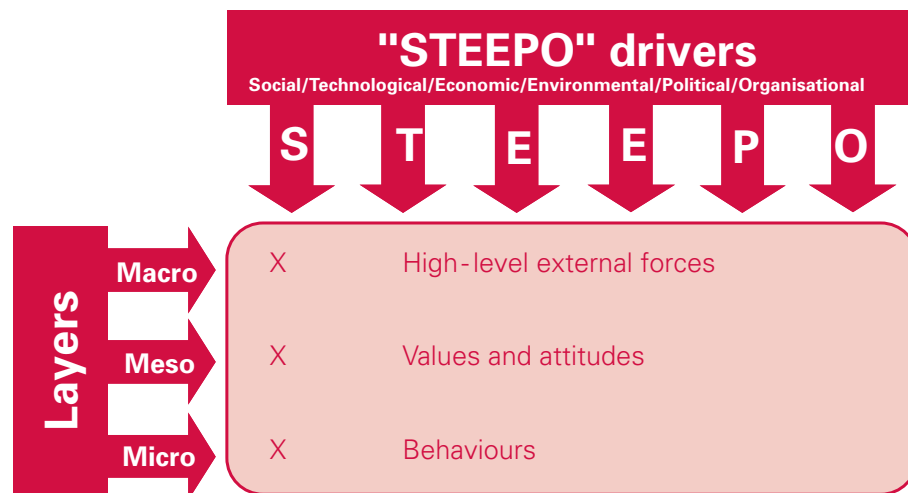
Source: Henley Centre

Stage 1: Driver assessment

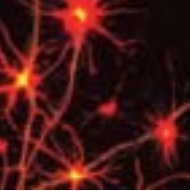
In preparation for the first workshop, Henley Centre assembled approximately 40 drivers of change, broadly speaking across the so-called 'STEEP' categories: Social, Technological, Economic, Environment, Political and Organisational (see Figure 3). A significant proportion of these drivers were specific to the area of brain science, addiction and drugs, although some captured wider social trends such as attitudes to leisure. They included technology and regulatory drivers. Sources included:

- analysis of the Brain Science Addiction and Drugs project output to date
- the Henley Centre's Knowledge Bank of drivers and trends, both qualitative and quantitative, including changes in consumer attitudes and behaviour as well as major shifts in society
- the initial scoping work conducted by Henley Centre for the project.

Figure 3: STEEPO Process



Source: Henley Centre



This stage concluded with a structured workshop which enabled participants to test the drivers in a number of ways including individual assessment, group review and plenary response, offering a valuable triangulation process to test the data. Techniques used included a proprietary Henley Centre technique based on 'Futures Wheels'. Importantly, the porous workshop process provided an opportunity for participants to add drivers they felt were missing.

The output of this first stage was a prioritised set of drivers, tested for both importance and uncertainty. There was a significant degree of consensus about those drivers which seemed most important in determining the future of brain science, addiction and drugs. The final prioritised set of drivers, in no particular order, is listed below:

- increasing social cost of drug use
- increasing drive to a performance culture
- increasing healthcare costs
- ageing population
- technological surveillance and control
- increasing knowledge about drug effects among professionals and users)
- widening gap between rich and poor
- increasing individualism
- new markets for psychoactive drugs and treatments
- increasing geopolitical instability
- increasing market for lifestyle drugs
- several generations having grown up with drug use
- convergence of food and drug industries
- shift towards harm-based view of regulation.

Stage 2: Scenario development

In consultation with the core Foresight team and Waverley Management Consultants, Henley synthesised the output from stage 1 to generate a proposed set of scenario axes and, subsequently, a short set of initial scenarios drafted by Alister Wilson of Waverley Management Consultants.

In order to develop the axes, the priority drivers listed above were assessed in terms of their relative impact on the other shortlisted drivers. This 'dependency analysis' identified:

- those drivers which are dominant and therefore have a major impact in terms of affecting change ('predetermined elements')
- those drivers which are dependent and are therefore relatively uncertain in their impact, as they tend to follow change ('critical uncertainties').

The drivers, which are both dominant and uncertain, give greatest scope for creating divergent possible futures and are consequently the key focus. The dependency matrix resulting from this analysis is in Table 2.

Table 2: Dependency matrix

Dominance				
H	<ul style="list-style-type: none"> - Increasing drive to a performance culture - Ageing population - Increasing individualism 		<ul style="list-style-type: none"> - Increasing healthcare costs - New markets for psychoactive drugs and treatments 	
M	<ul style="list-style-type: none"> - Several generations have grown up with drug use 	<ul style="list-style-type: none"> - Widening gap between rich and poor 	<ul style="list-style-type: none"> - Shift towards harm based view of regulation - Increasing market for lifestyle drugs - Increasing social cost of drug use - Increasing knowledge of effects of drugs (professionals & users) 	
L	<ul style="list-style-type: none"> - Increasing geopolitical instability 	<ul style="list-style-type: none"> - Convergence of food and drug industries 	<ul style="list-style-type: none"> - Technological surveillance and control 	
	L	M	H	Dependency

Source: Henley Centre



The drivers which emerged as being both relatively dominant and relatively dependent were then clustered and synthesised to generate two axes or dimensions, which in turn create a framework on which the scenarios could be developed. The prioritised drivers were:

- increasing social cost of drug use
- increasing healthcare costs
- increasing knowledge about drug effects (professionals and users)
- widening gap between rich and poor
- new markets for psychoactive drugs and treatments
- increasing market for lifestyle drugs
- shift towards harm-based view of regulation.

The two emerging clusters and the drivers which they captured were:

■ **Regulation**

- shift towards harm-based view of regulation
- increasing social cost of drug use
- increasing knowledge of effects of drugs (professionals and users)
- increasing healthcare costs.

■ **Psychoactive substances use and supply**

- new markets for psychoactive drugs and treatments
- widening gap between rich and poor
- increasing market for lifestyle drugs.

When building the scenario axes, consideration of three factors is important:

- there should be a degree of uncertainty about each axis
- there should be a degree of complexity about each axis
- axes should be different in nature (i.e. not collapse on top of each other)

Various iterations of axes were considered. The final combination was regarded as being the set which most rigorously reflected the output of the dependency matrix, and which created strategically useful and interesting scenarios for Foresight.

The vertical axis: basis for psychoactive substance use (Life enhancement  Life preservation)

This is a versatile axis which may relate to the views of the individual, community or society; the communities may be ethnic, geographical or demographic in their nature. At one extreme, life enhancement involves continuous modification of mood and behaviour. It may also include faster transition to medicalisation and more regulatory, market, and cultural adaptation to non-medical uses. At the other extreme, life preservation includes all psychoactive substance use for therapeutic conditions. As an axis, it provides a certain degree of flexibility. For example, history shows us that what is classed as a disease may change over time. This axis allows for such changes to be reflected in the scenario narratives.

The horizontal axis: basis for regulation (Evidence-based regulation  View-based regulation)

This axis relates to factors that underlie regulation and control of drug use by Government. Evidence-based regulation is informed by current scientific knowledge and is considered in light of the harms and benefits to the individual, community and society that are attached to the use of different psychoactive substances. At the other extreme, view-based regulation describes an apparently arbitrary, historical, moralistic or non-science-based policy approach to psychoactive substance control. It incorporates the control of psychoactive substances purely on the basis of their psychoactive properties, rather than taking into account their other effects, whether beneficial, harmful or pleasurable.

Based on these two axes, short scenarios or potential futures were developed for each of the four possibilities using combinations of the extremes of each scenario axis (see Figure 4). It was recognised that parts of each of these scenarios could play out at different times in different cities, or indeed different households. The 'real' future probably lies in some combination of these wide-ranging possibilities.

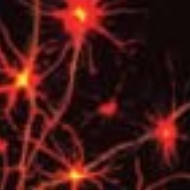
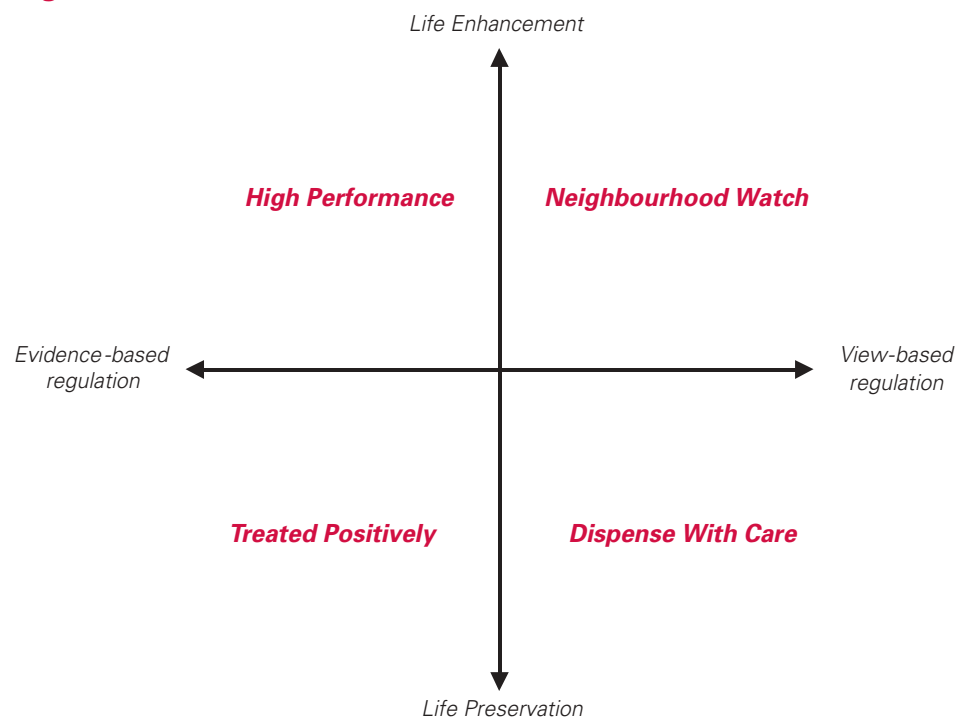


Figure 4: The scenario matrix



Source: Henley Centre/Waverley Management Consultants

The subsequent workshop allowed these scenarios to be tested and developed in a series of facilitated groups and plenary review sessions by the attendees.

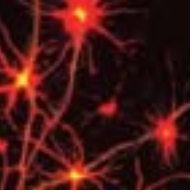
The narratives were then written up as a fuller set of contextual scenarios by Alister Wilson.

Stage 3: Scenario testing and assessment

The third phase tested the scenarios for robustness and credibility and included two key strands. The first involved validating questions about the scenarios which emerged from the development phase. This was done via a combination of group discussion and plenary review and response.

The second involved constructing plausible journeys across the timeframe of the scenarios, focusing on the key turning points in each narrative. This is a critical element of scenario planning. The literature points out that good scenarios 'explain how the change unfolded'. Finally, a 'plausibility and favourability' exercise was carried out in order to test, explore and validate the assumptions of participants relating to the scenario narratives.

This final workshop provided the remaining input to the full-length scenarios which can be seen in Sections 4–7.



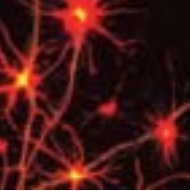
Acknowledgements

To all those participants who contributed so constructively and enthusiastically to the workshops which ran between November 2004 and March 2005.

List of publications: Drugs Futures 2025?

All publications are available in hard copy and/or can be downloaded from the Foresight website except those marked *** which are available only from the website (www.foresight.gov.uk).

1. Executive summary and project overview
2. State-of-science reviews ***
 - I. Cognition Enhancers
 - II. Drug Testing
 - III. Economics of Addiction and Drugs
 - IV. Ethical Aspects of Developments in Neuroscience and Addiction
 - V. Experimental Psychology and Research into Brain Science and Drugs
 - VI. Problem Gambling and other Behavioural Addictions
 - VII. Genomics
 - VIII. History and the Future of Psychoactive Substances
 - IX. Life Histories and Narratives of Addiction
 - X. Neuroimaging
 - XI. Neuroscience of Drugs and Addiction
 - XII. Sociology and Substance Use
 - XIII. Social Policy and Psychoactive Substances
 - XIV. Psychological Treatment of Substance Abuse and Dependence
 - XV. Pharmacology and Treatments
3. State-of-science reviews (2 page summaries)
4. Ethical issues and addiction overview ***
5. Horizon scan
6. The scenarios



7. Public perspective
8. Perspective of the pharmaceutical industry
9. Modelling drug use



Printed in UK on recycled paper with a minimum HMSO score of 75
First published July 2005. Department of Trade and Industry. www.dti.gov.uk/
© Crown Copyright. DTI/Pub 7920/3k/07/05/NP. URN 05/1184