# The Futures Toolkit

## Thinking in practice

# Welcome!



Government Office for Science

## The Futures Toolkit

Tools for Futures Thinking and Foresight across UK Government

Edition 1.0

November 2017

## Aims of this training course

- To introduce futures thinking

- To introduce the Futures Toolkit

- To try some of the tools

- …and show how straightforward they are

- To share experience of futures work in government and elsewhere

- To explore the context in which you might want to use futures

# Welcome!



# Learning outcomes

- You'll know what futures techniques are and why you might use them

- You'll have tried out several tools

- You'll be able to describe when a particular tool/technique might be used

- You'll have a good idea of the types of questions futures techniques can give you insight into, and how the techniques can help policy makers address these questions

- You'll be able to explain how different techniques might be configured and integrated into policy and strategy projects

# Structure



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Introduction: What is futures thinking?

Practice: Horizon scanning

Practice:  Driver mapping

Practice: Scenario building

Presentation: Case studies

# What do you want to get out of the training?

Better understanding of different futures techniques and when to use them

Futures is normally presented as just being about horizon scanning, so interested to hear about the other bits

General awareness of the toolkit and how to apply in practice

I am currently evaluating a report we commissioned looking at the future of transport skills, which used the futures method. I'd like a better understanding of the method so I can usefully evaluate the project

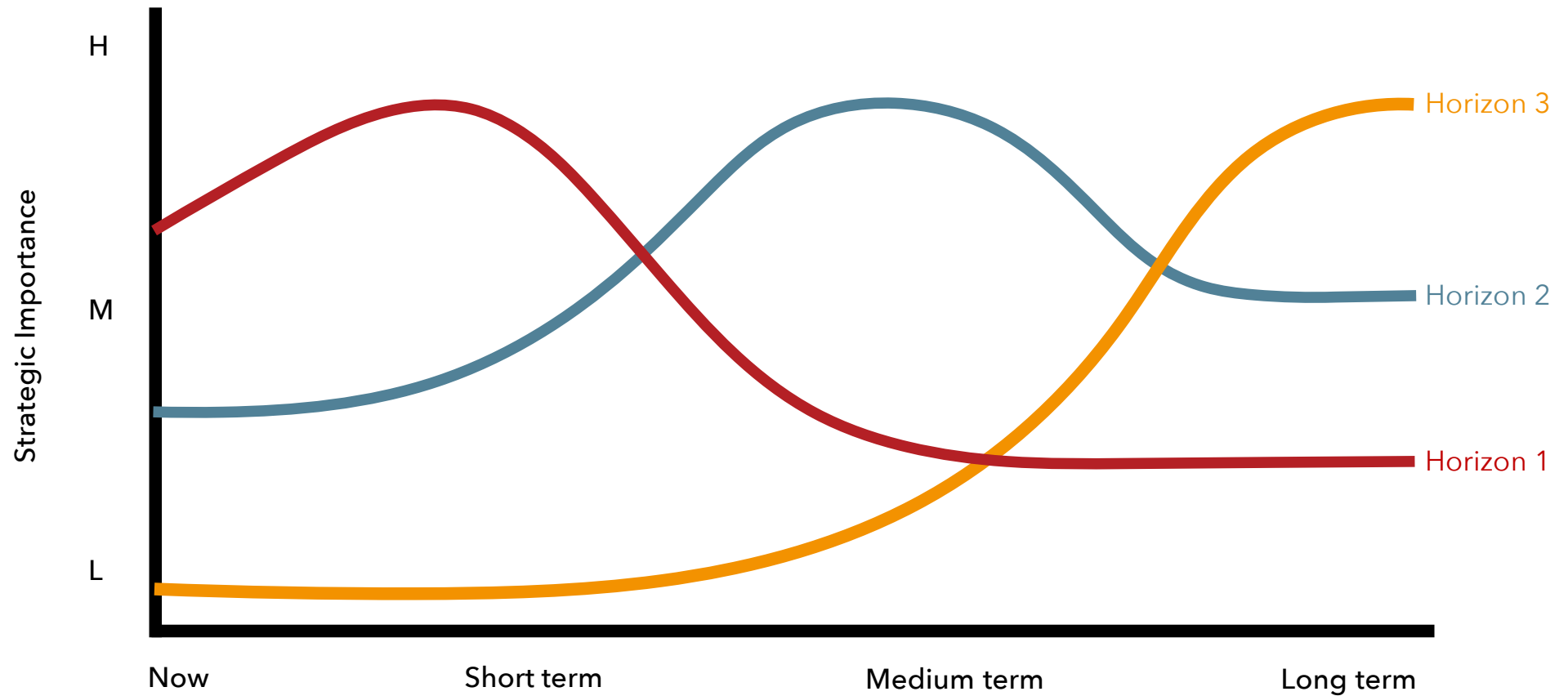Examples of futures thinking successfully applied to policy making

See how futures techniques are applied to policy

See how the brilliant Alister delivers this toolkit training online!

Empowered to use futures and challenge when it isn't being used but should be

Convincing people of the value of futures thinking when their remit only covers the next election cycle

Reinforcement, understanding and comparison of my current and previous knowledge to best practise outlined in this training

To learn incorporate futures thinking and planning into my work more

An understanding of how to incorporate futures thinking into common work activities

Learning more about what it means to do horizon scanning

To see what the toolkit training is all about - new to the GOScience futures team

Better idea of how to collect info on new tech/science/trends

# Looking ahead: the three horizons model



Strategic Importance

H

M

L

Now     Short term     Medium term     Long term

Horizon 3
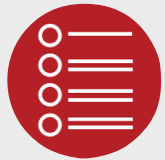
Horizon 2

Horizon 1

# The Futures Toolkit



## Tools for Futures Thinking and Foresight across UK Government
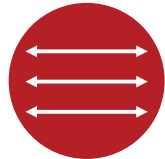
**Edition 1.0**
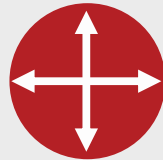
**November 2017**

# 12 tools



**Gathering intelligence about the future**

**Exploring the dynamics of change**

**Describing what the future might be like**

**Developing and testing policy and strategy**

# Horizon scanning

Horizon scanning is the process of looking for early warning signs of change in the policy and strategy environment

**Aims:**
➲ To gather information about emerging trends and developments that could have an impact on the policy or strategy area in the future
➲ To explore how these trends and developments might combine and what impact they might have
➲ To involve a range of people in futures thinking and increase their knowledge and insight about the changing policy environment

**Approach:** Combines desk research and – if required – workshop discussion

**Participants:** Anyone you want to involve in futures work. Participants can come from inside or outside the team or organization

**Number:** No restriction

**Timing:** Best run over several weeks. Can be run throughout the project to build intelligence about the changing external environment

**Facilitation:** Novice

**Output:** Individual scans gathered into a horizon scanning report. Scans can be presented by theme or set out randomly

**Outcome:** Horizon scanning helps participants read news articles and journals differently and to develop a long term perspective

**Good for:**
➲ Engaging people in the futures process
➲ Gathering a range of opinion

**Risk:** **Low.** The main risk is not including important or insightful stakeholders, resulting in missed content and lowered credibility

**Get here from...**

- Horizon scanning is the first step in gathering intelligence through desk research

**Move on from here to...**

- Drivers analysis

**Use the output to inform...**

- Delphi
- Drivers analysis
- Scenarios
- Visioning

Introduction/the futures toolkit

## The Approach

Horizon scanning looks towards the long term (Horizon 2-3) but is not focussed exclusively on it; many H3 developments are the long term outcome of a range of factors, some of which are in play already.

Horizon scanning is an open ended process that can involve as many people as you want. Start with the internal team and then think about inviting externals who have a good knowledge of the policy area. To keep the process manageable, you may wish to start with no more than 10 people. You can expand the network at a later date once you have worked out the logistics of your scanning process.

Start by asking each scanner to produce one short article (or 'scan') per week that describes

- What the scan is about

- How it relates to the policy or strategy area

- Why the reader thinks it is important and what thoughts the scan stimulated

The scan can contain links to the original source material and to any other relevant or interesting articles that the scanner is aware of. Ideally, scanners should keep each scan to a single page.

This is a productive process: 10 authors each producing one scan per week will produce 60 scans (or more) over 6 weeks. You will need a project manager to gather the individual scans and to organize them.

Horizon scanning is relatively straightforward but does rely on intuition and insight - which can feel counterintuitive to those who are more practiced in evidence based strategic thinking. The hardest part for many authors is knowing whether something they have read is interesting or different enough to include in the scan. Scanners should always err on the side of being irrelevant.
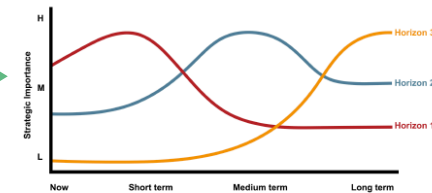
*Scans can be organized in the horizon scanning report using the PESTLE framework (see **Driver mapping**) but it is often more interesting to group them by themes that emerge from the scans themselves*

Find sample scans in Annex 1

See the case studies in Annex 5

Introduction/the futures toolkit

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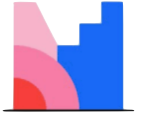
**Practice:** Horizon scanning

**Practice:** Driver mapping

**Practice:** Scenario building

**Presentation:** Case studies

If you could speak to someone from 2035 who could tell you anything about health and wellbeing in the UK, what would you like to ask?

- Who pays for it?

- What is life expectancy? Have you cured cancer?

- Have services for mental illness been levelled up yet?

- Have there been any more serious pandemics since covid?

- Is health more important than wealth?

- What has the impact of anti obesity campaigns been on public mental health and eating disorders in young people?

- Do we invest more in prevention than cure?

- It is accessible to everyone?

- Are children/teenagers taught about mental health in schools in a way that is actionable?

- Is there anything we are doing now that we don't realise will affect our health yet?

- What level of health disparities between different groups (e.g. socio-economic, 'postcode lottery' exist)

- How effective are current mental health provisions in 2035?

- What support is available across sectors to support mental health in the work place

- What new applications of AI and data science have been incorporated into healthcare - and what decisions have been made around ethics?

- What has been the biggest change in healthcare over the past 15 years?

- Are mental health services more accessible?

- How has the NHS changed, is it still providing free care to all?

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- Individually…

- Search for news or research articles that have something interesting to say about the future of health and wellbeing

- Bookmark them and/or make a note of what interests you about them

- 20 minutes

- Come back and talk about what you found

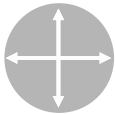- Look for connections, challenges and opportunities for the future of health and wellbeing

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*Looking towards Horizon 3…*

*What are the key drivers that will shape the future of healthcare globally?*

Political

Economic

Societal

Technological

Legislative

Environmental

**More important for healthcare in the UK**

genetic editing of embryos

Rise of popularism

racial inequalities surrounding healthcare provision

regulation of healthcare

trust in the healthcare system

Internet of things

Air quality

climate change

demographic ageing

eco anxiety

criminal justic esystem - helathcare in the prison poulation and wider impacts

Rising cost of healthcare

uncertain global stability

AI

unequal access to healthcare

uncertainty around economic growth

Poverty and income inequality

Animal/human interactions

personalised genomics for diagnostics

shifting global relationships

Pay for health care workers (affecting recruitment/retention)

legally binding international treaties

**The outcome is certain**

**The outcome is uncertain**

who pays for healthcare

exoskeletons to aid mobility

regulation of alternative medicine

wearable technology - personalised diagnostics

genetic engineering of (eg) crops and novel antibiotics

nootropics

**Less important for healthcare in the UK**

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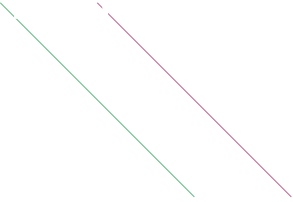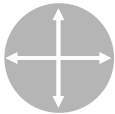
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Equal access to care

Extensive adoption of
technology in diagnostics
and treatment

Limited investment in
technology for diagnostics
and treatment

Conditional access to care

## Axis diagram

Equal access to care

Extensive adoption of technology in diagnostics and treatment ⟷ Limited investment in technology for diagnostics and treatment

Conditional access to care
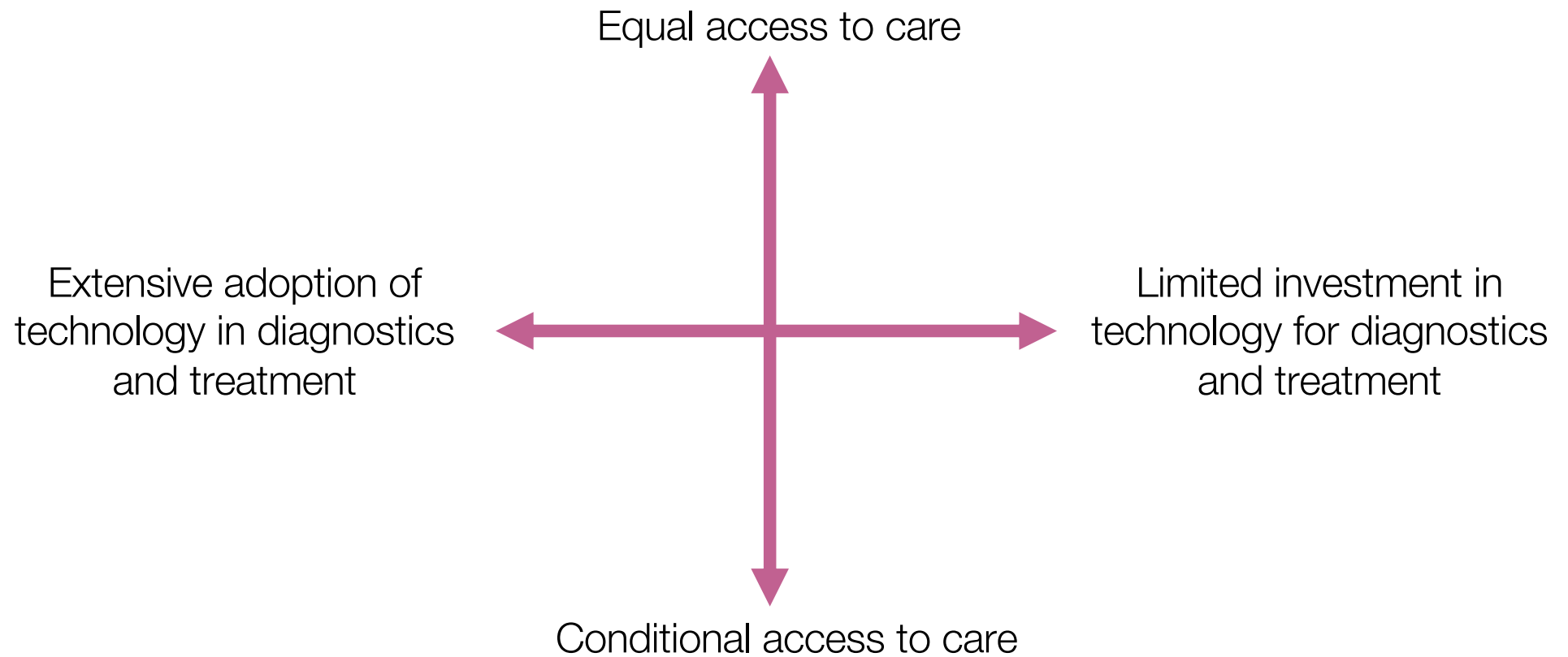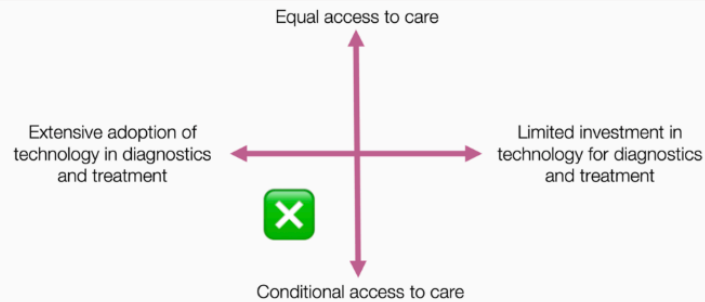
### Context

- It is 2035.
- Public debt remains high and the government has to make difficult choices to allocate funding where it is most needed.
- Assume that Covid is managed effectively through public vaccination.

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### The UK

- What are the *primary* pressures on government that have resulted in the UK arriving in your scenario?
- Assume that healthcare in Britain is in step with the mood and confidence of the nation. How do you think the UK is doing in your scenario? Why is that?
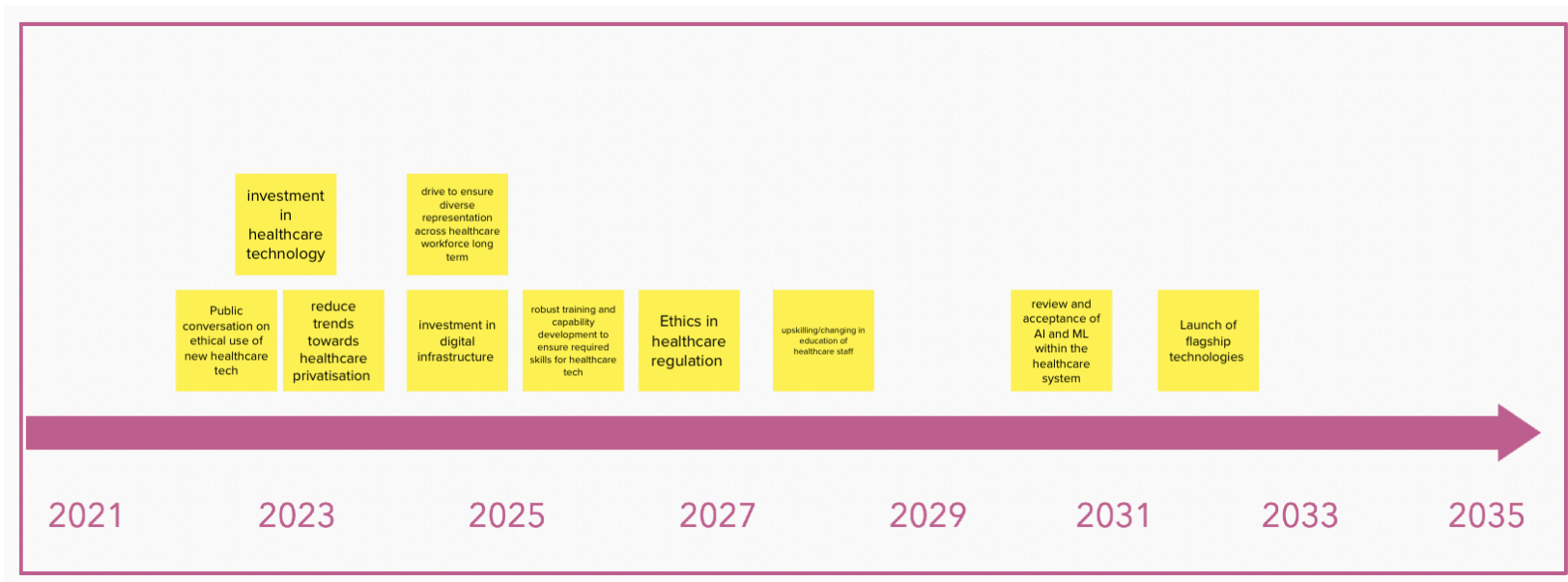
### Health and wellbeing

- Are patients confident about the care provided by the NHS? What makes them feel that way?
- How is healthcare funded?
- Is access to the NHS the same for everyone? Or does it differ by region/need /ethnicity?
- What role does the private sector play?
- Does mental health have parity with physical health?
- What are the key productivity measures that are used to determine funding?
- Can people still see their GP in person?

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## The UK

| | | | | | |
|---|---|---|---|---|---|
| NHS under huge strain >>> | Ageing pop | Migrant pop | stretched finances for public health | 'Passports' created access gap | Devolved power means unequal distribution, funding & service (eg Scotland leaving) |
| Competing policy priorities | Lobbying pressure from private actors to implement / rollout tech | Bottom-up, public-led pressure to adopt/roll-out tech | Govt health system undermined by external actors/ innovators | Greater PPPs | |
| UK economy might not be v buoyant | Fragmented healthcare/ education/ care systems | Divides in cultural openness/ receptiveness | Wealth divides eg who can pay to access tech solutions | post code lottery | economic inequality / unemployment has persisted |

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## Health and wellbeing

| | | | | | |
|---|---|---|---|---|---|
| Confidence depends on where you live | Best quality care may not even come from the NHS | Access depends on your willingness / readiness to adopt tech | ...and your cultural / personal background | Govt hasn't engaged / educated the public well enough | ...and media / prominent voices have shaped a divisive narrative |
| Echo chambers and mis- / disinformation prevail | The new tech requires trusted advocates to convince patients | access to GP depends on nature of illness or ability to pay | disparity of take up of tech/ online services due to demographics | access to healthcare for homeless/vulnerable people | some services funded / delivered by charity sector |
| tech allows more monitoring of mental health | increase in prescribing of tech based or non-medical responses to mental health | confidence in health system to engage personally - eg to deliver results/bad news | systems level metrics / data | which part of system is most profitable | which treatments / services are lowest cost - competitiveness |
| better sharing of anonymised data at government level - joined up - open but secure | access to single system of registration - health ID | excludes people without health status | impact of increased data storage on env policies | private companies have access to data through wearables - might improve diagnostics but conditional access | Top tier users/ citizens feel confident, bottom tier don't |

**2021**     **2023**     **2025**     **2027**     **2029**     **2031**     **2033**     **2035**

Timeline notes:
- investment in healthcare technology
- drive to ensure diverse representation across healthcare workforce long term
- Public conversation on ethical use of new healthcare tech
- reduce trends towards healthcare privatisation
- investment in digital infrastructure
- robust training and capability development to ensure required skills for healthcare tech
- Ethics in healthcare regulation
- upskilling/changing in education of healthcare staff
- review and acceptance of AI and ML within the healthcare system
- Launch of flagship technologies

Your scenario's name is:

Digital Health Harmony

# Futures in practice

- → 7 questions issues paper

- → Using scenarios to frame futures research

- → Using scenarios to test strategy and policy (DfT, HE)

- → Using futures to to build stakeholder engagement and insight

- → Using horizon scanning to determine a new course of action in the immediate future