

Applying scenario methods to health and social care workforce planning

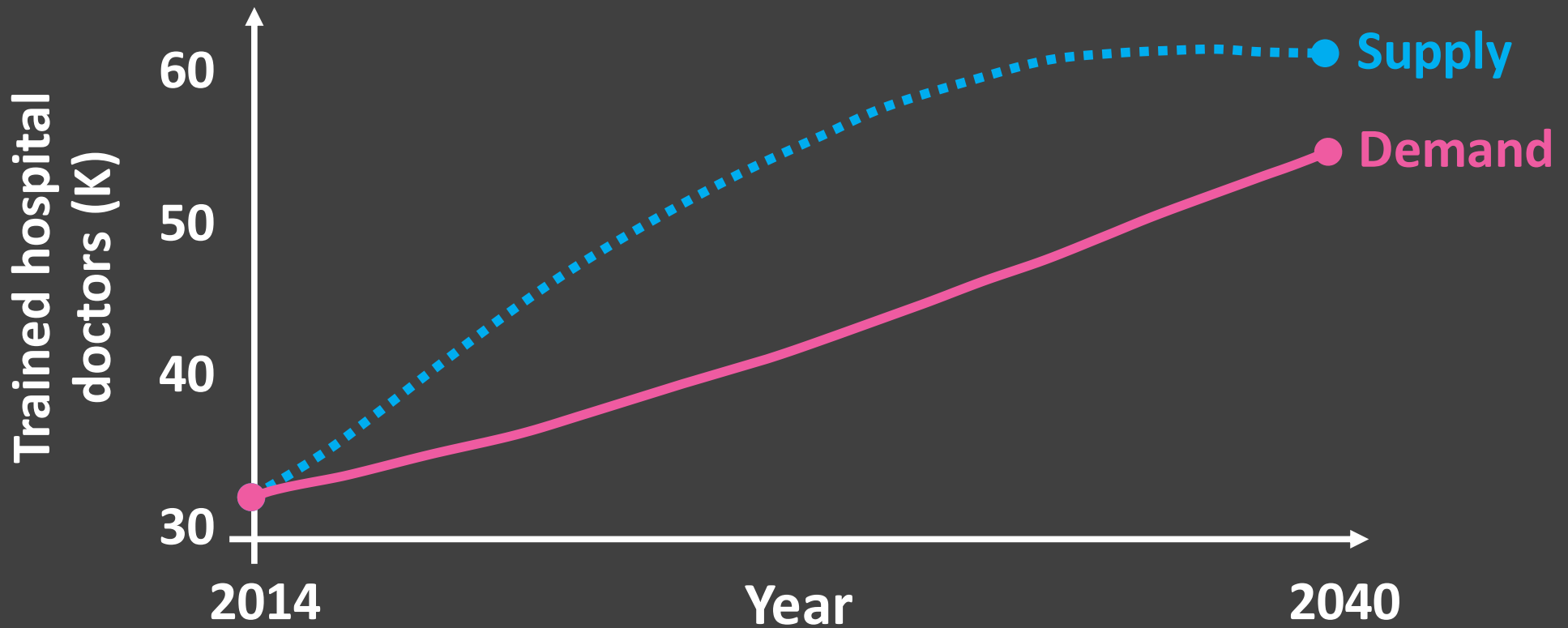
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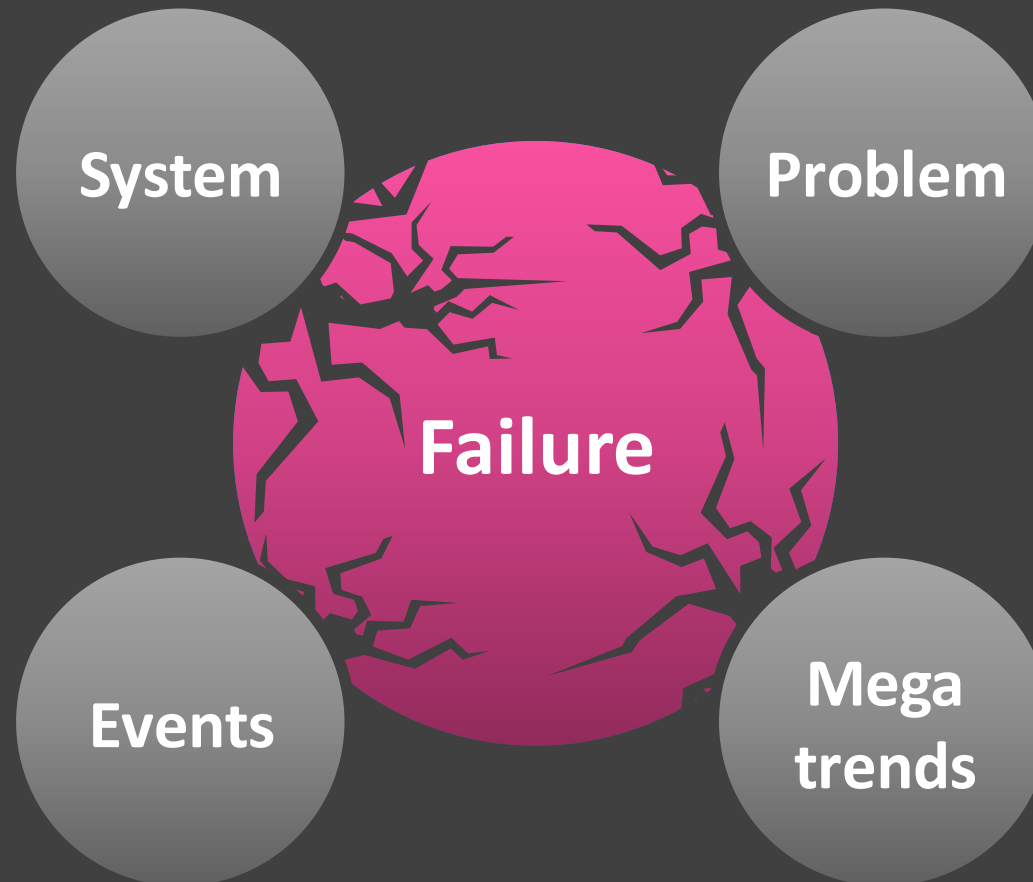
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What we used to do...



Do we trust this?

What if the future is not what we expect?



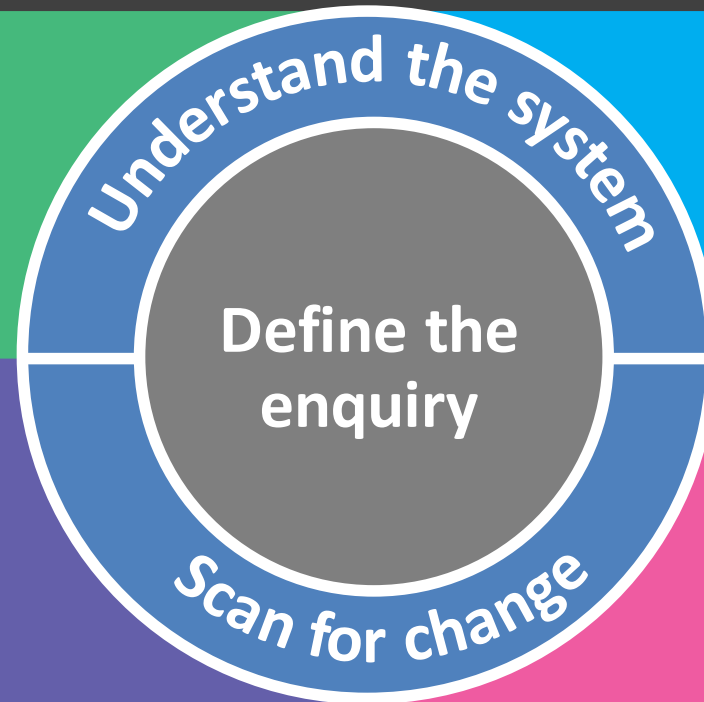
Robust workforce planning

Shape your
future

Scan the
horizon

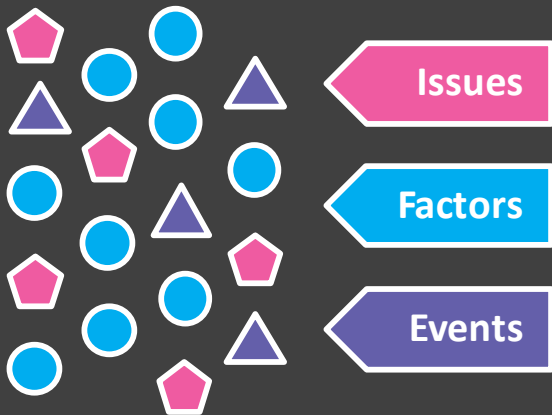
Stress test
interventions

Imagine challenging
futures

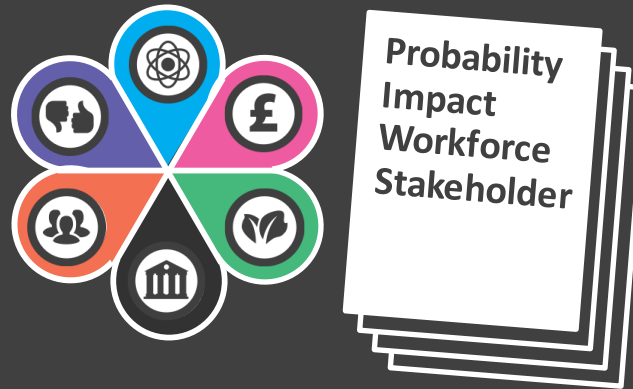


Horizon scanning

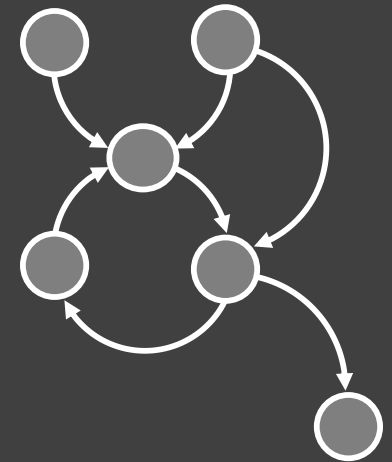
Contextual analysis



Ideas about the future

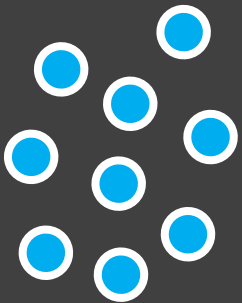


Systemic analysis

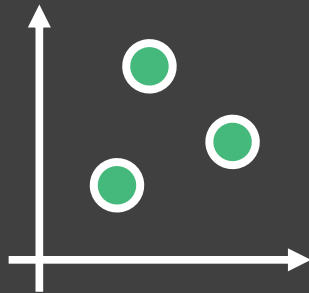


Scenario generation

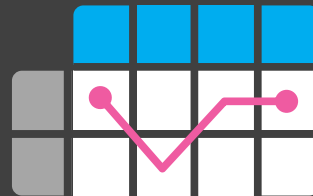
Influencing factors



Key factors



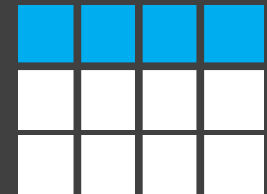
Consistency check



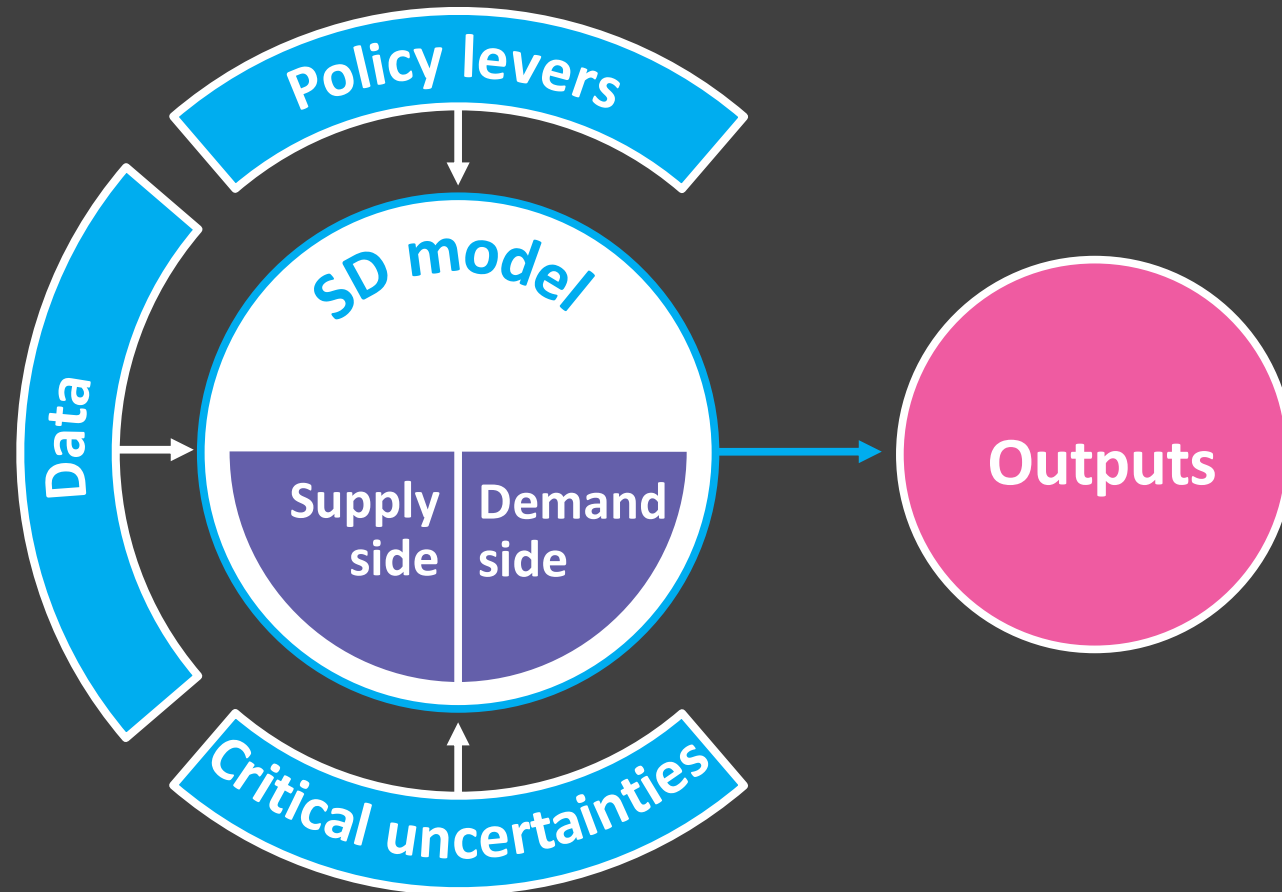
Narrative scenarios



Delphi to quantify



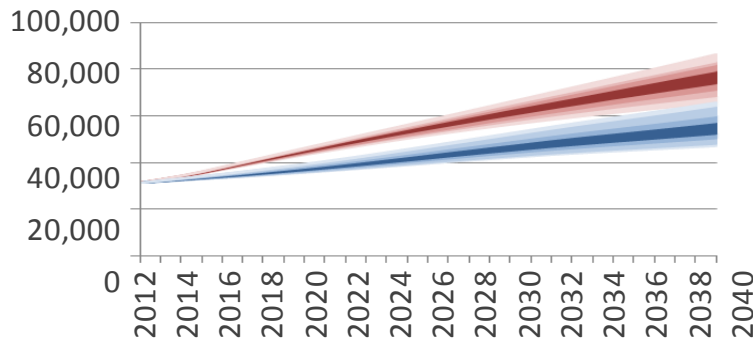
Modeling and simulation



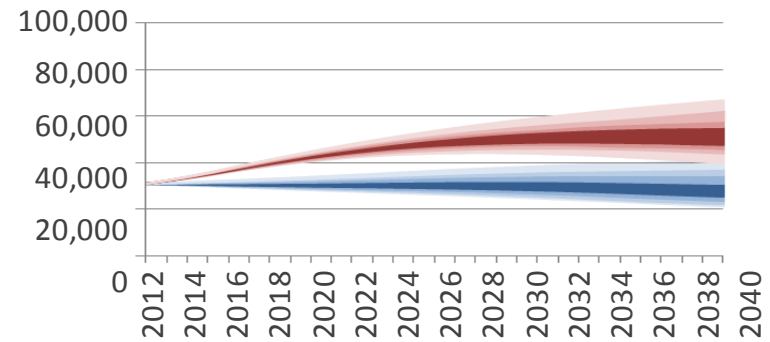
Pharmacy: how uncertain is the future?

Number of pharmacists (full-time equivalent)

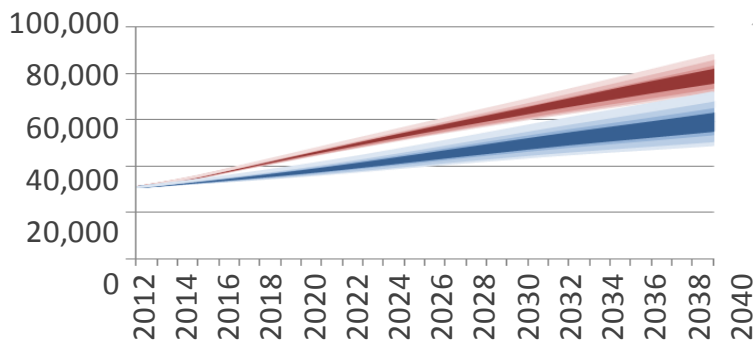
Scenario 1



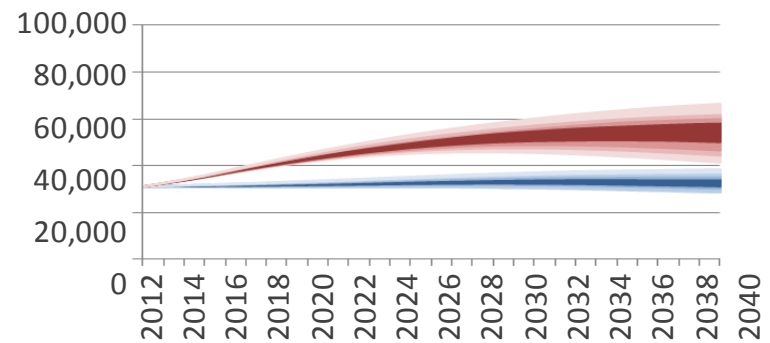
Scenario 2



Scenario 3



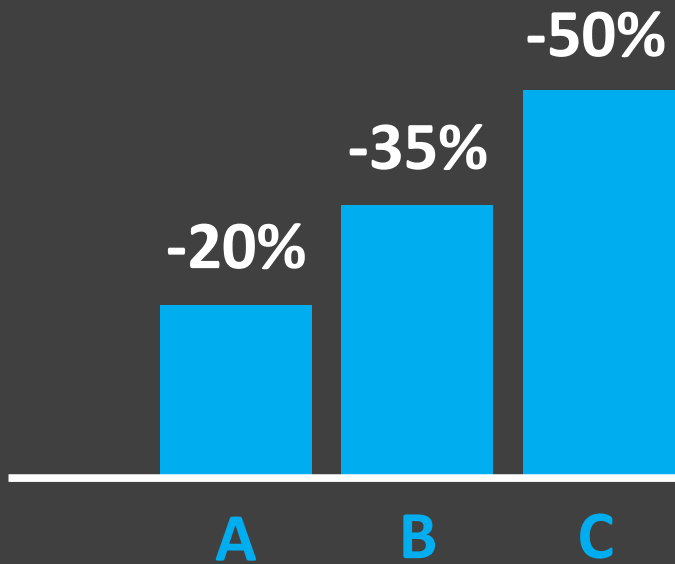
Scenario 4



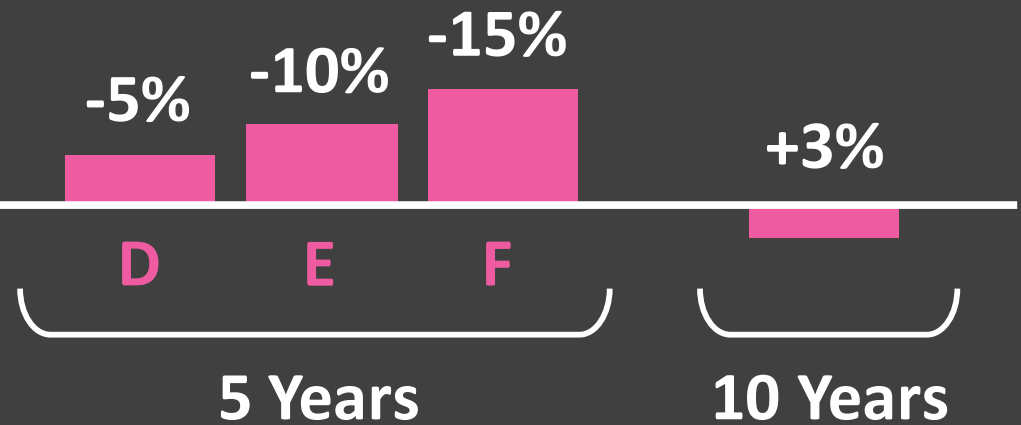
Year

Policy options

One-off supply reduction

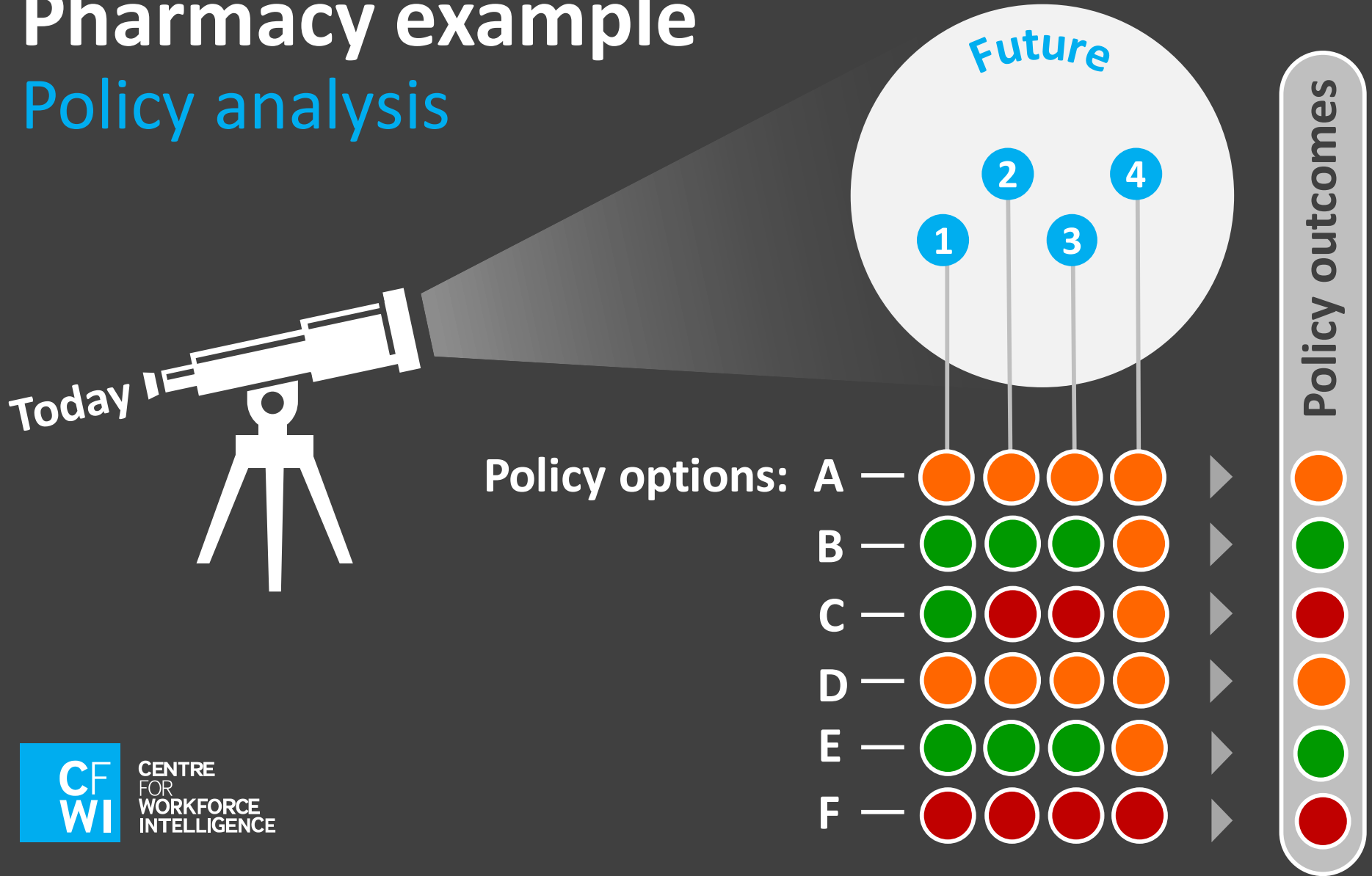


Phased supply reduction then balancing increase



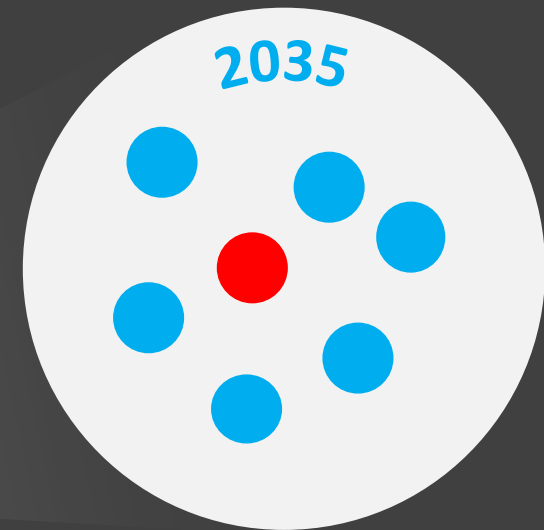
Pharmacy example

Policy analysis



A new challenge: Horizon 2035

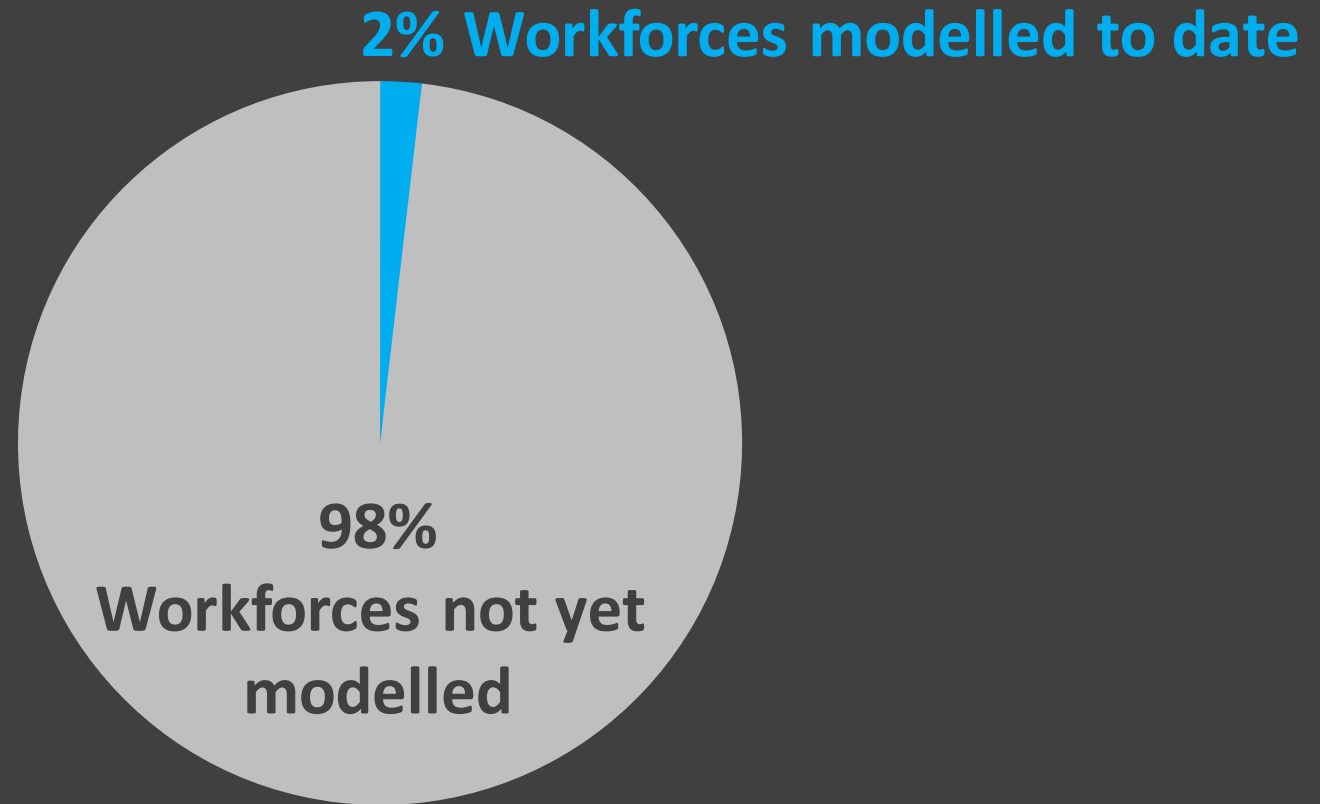
What skills and competences do we have?



What might we need in future?

What had we modelled in 2013?

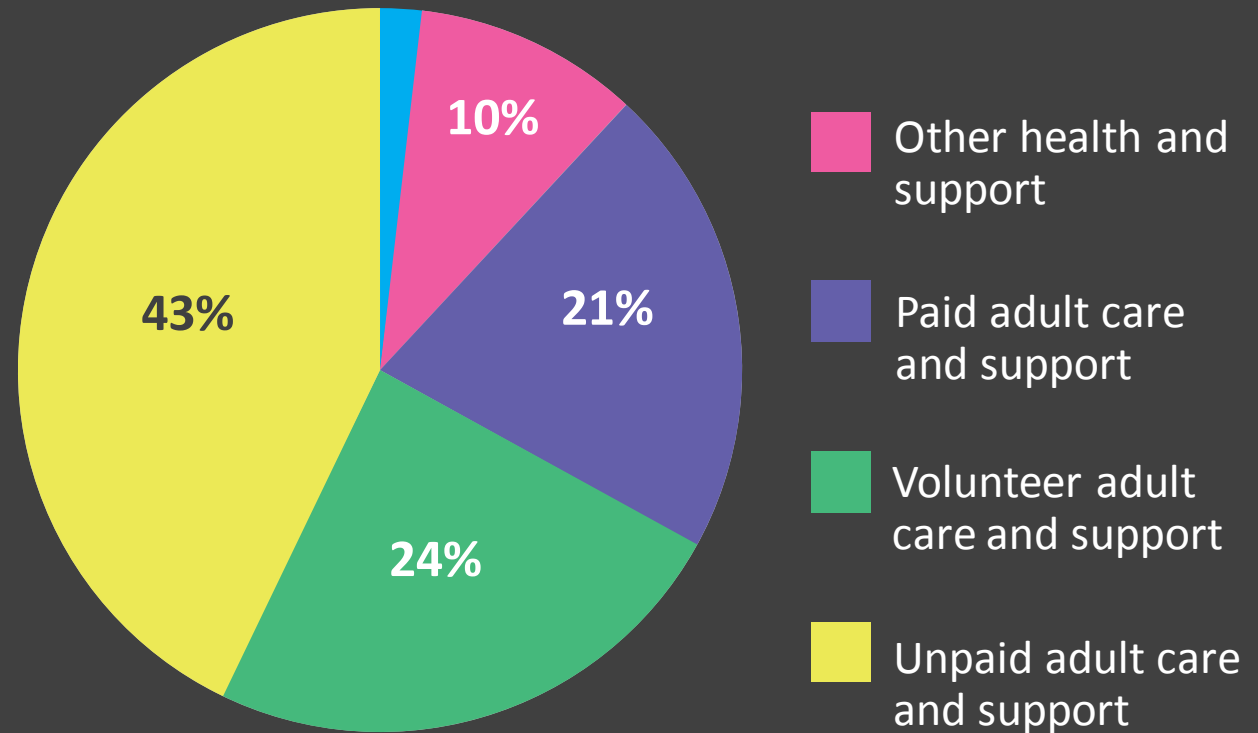
Health
Public health
Social care



What about the rest of the system?

Health
Public health
Social care

2% Workforces modelled to date



Some embarrassing problems...

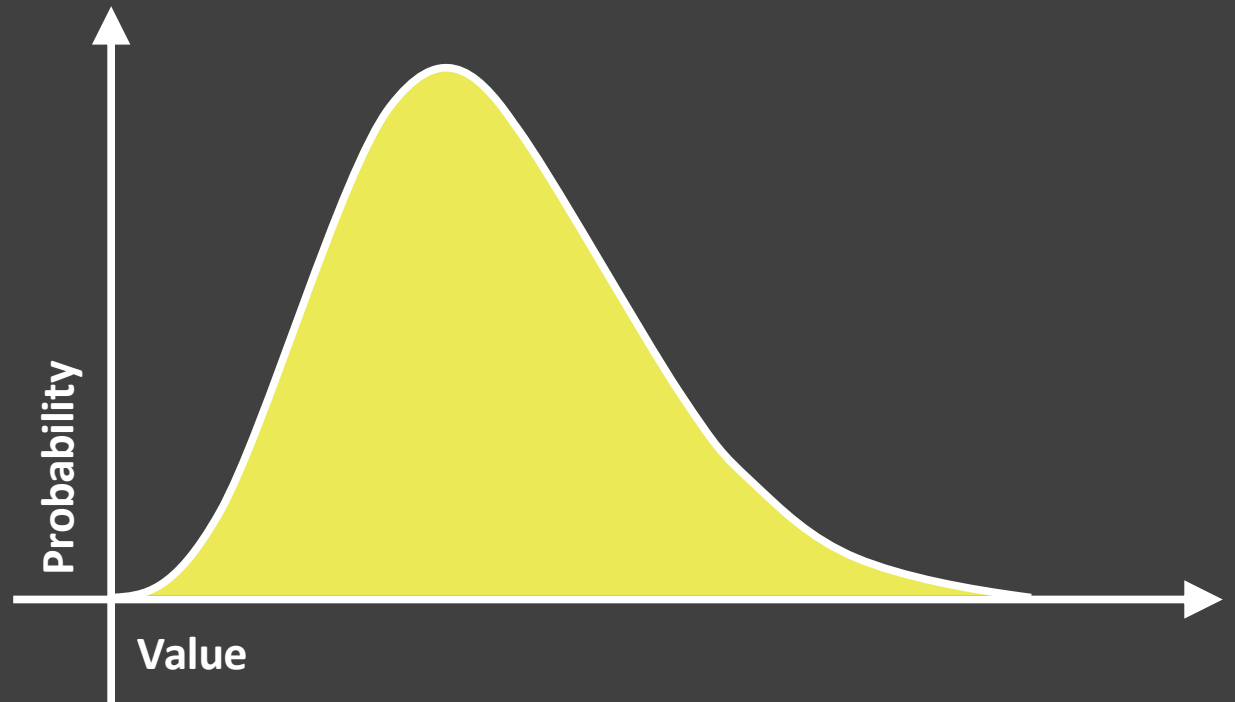
...mostly resolved!

1. Too many Delphi questions!
2. Only four scenarios?
3. We don't know what skills are needed to meet future demand.

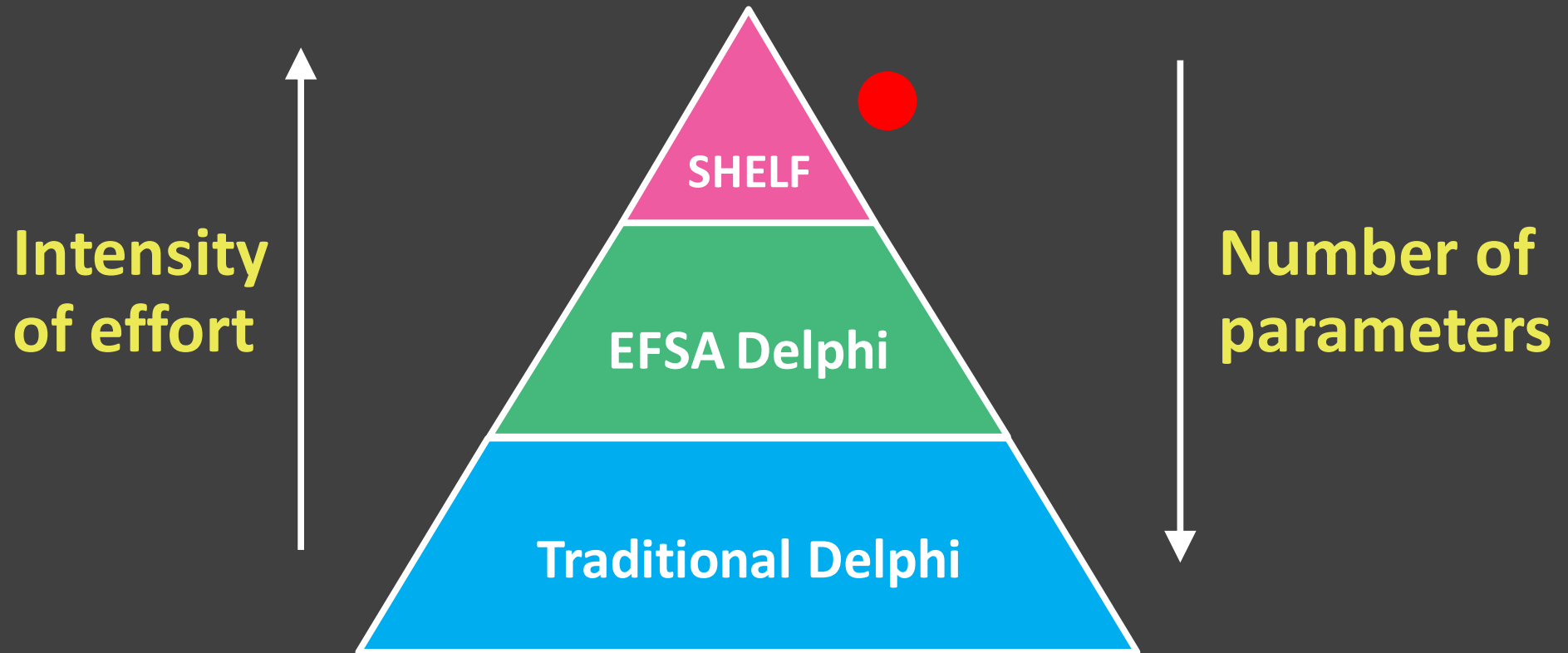
Solution 1: SHELF

Sheffield
Elicitation
protocol

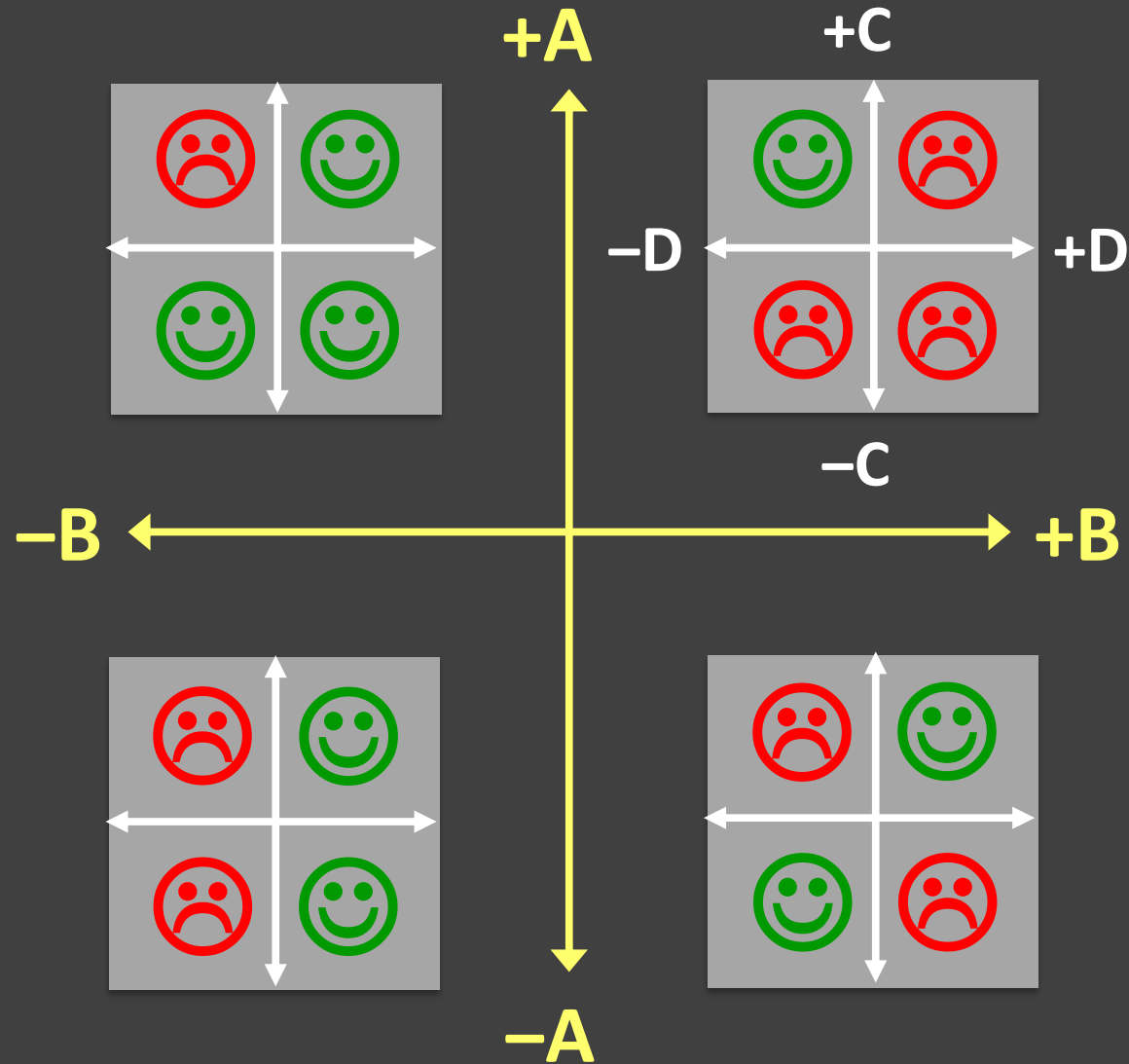
Monte Carlo
simulation



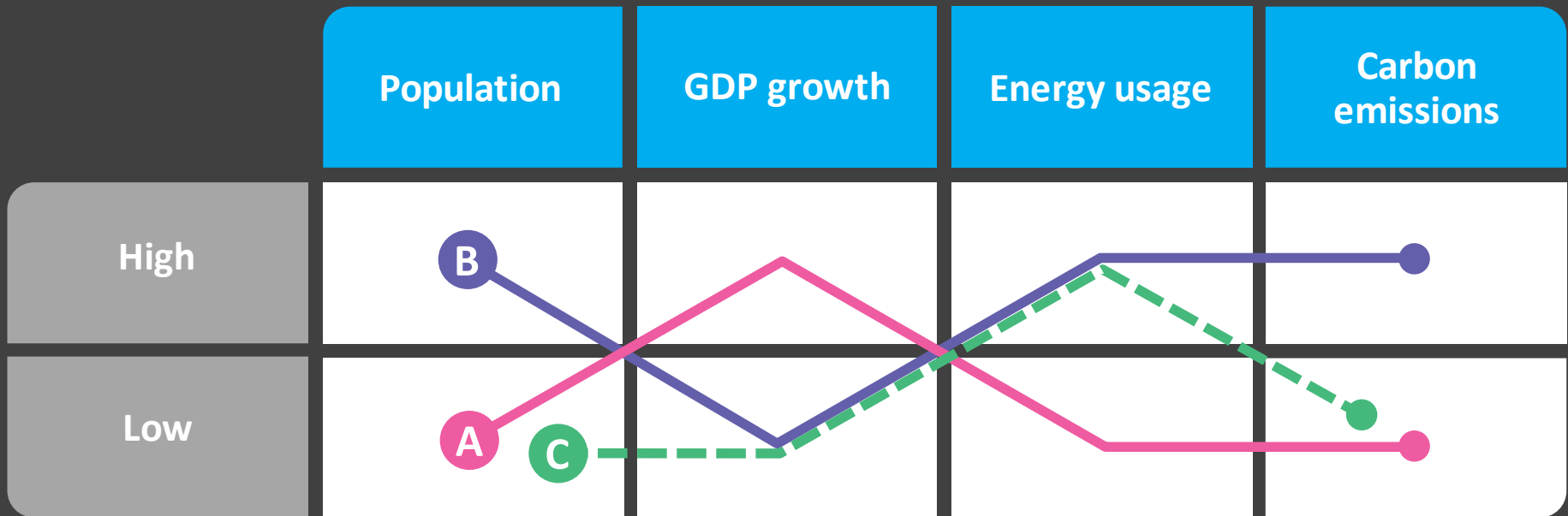
Solution 1: Expert elicitation framework



Solution 2: GBN method



Solution 2: CIB Analysis



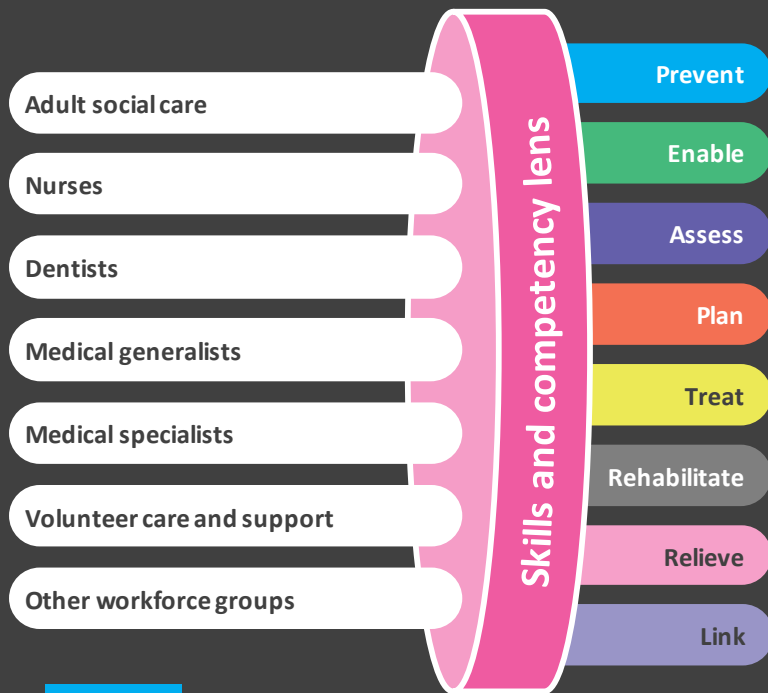
Solution 3: Skills framework



What skills do you have today?

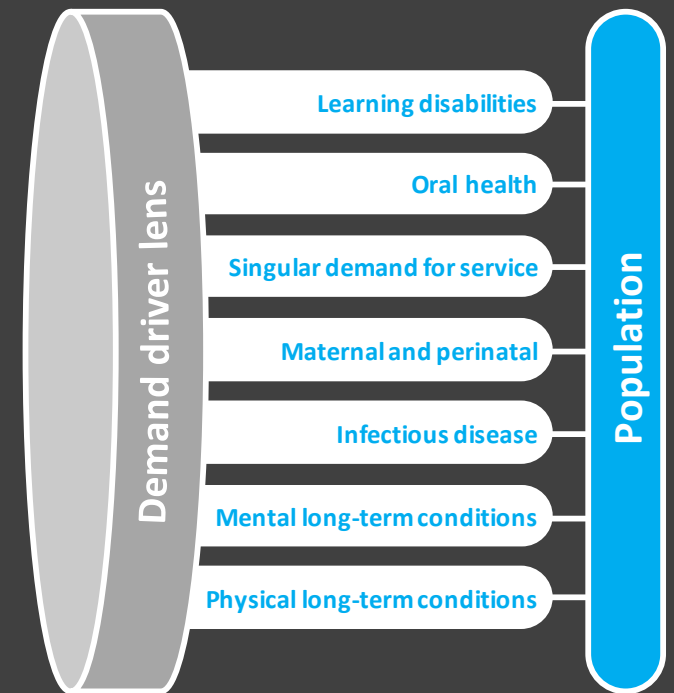
Workforce groups

Skill types



What drives the demand for skills?

Demand **Population**



How do our skills meet demand?

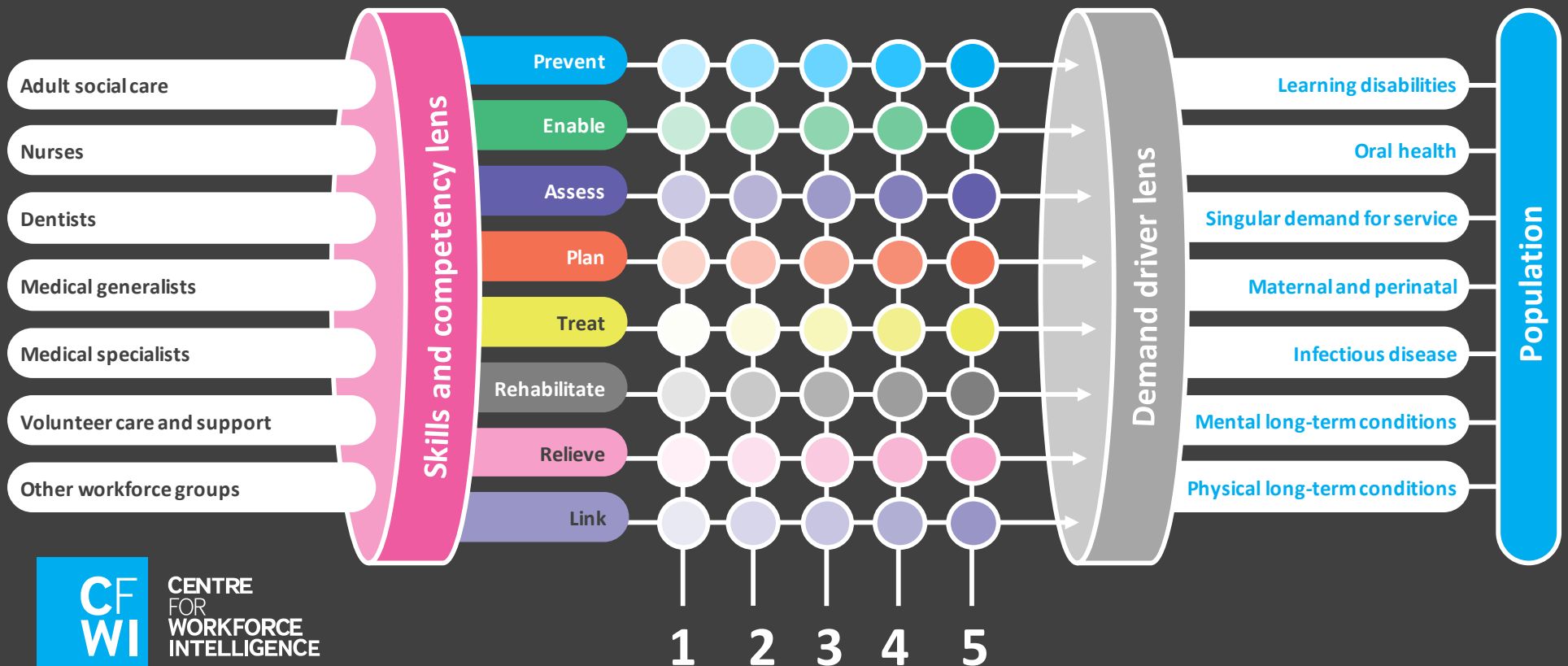
Workforce groups

Skill types

Levels

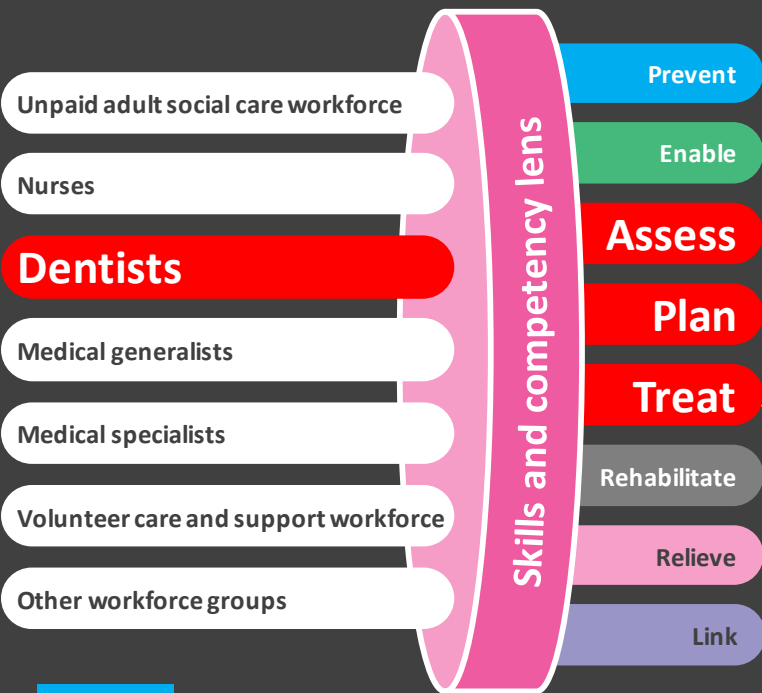
Demand

Population



How do our skills meet demand?

Workforce groups

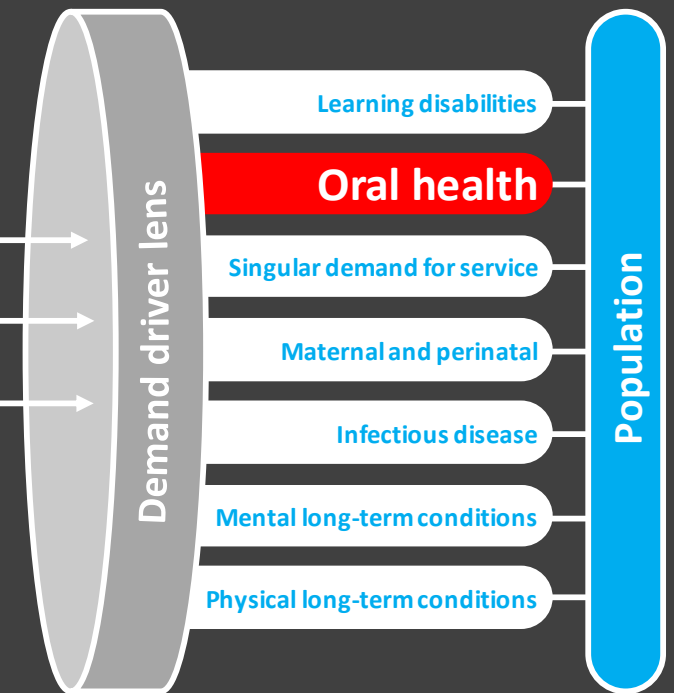


Skill types

Levels

Demand

Population



Different futures

Six narrative and quantified scenarios

Win-win

This is an overview of the stakeholder-created scenario 'Win-win' where, as a result of a very flexible workforce, positive economic conditions, strong engagement of the population in their care and high levels of technology, both the workforce and service users benefit from joined-up care and services. The CWI uses scenarios to consider different futures. Stakeholders involved in the CWI Horizon 2035 programme have created an high-impact, challenging but plausible scenario. They are designed to be tools that aide the testing of future thinking based on the decision-making happening now. These scenarios are not statements of policy or how we or our stakeholders expect the future to unfold.

	Now to 2020	2020 to 2030	2030-2035
Service users	Service users gain more rights and responsibilities	Protections encourage self-care and support the adoption of self-management	Most service users manage own care through technology-enabled self-care
Workforce	Service user empowerment changes workforce education and recruitment	Integrated education and training encourages bridges between workforces	The greater risk of flexibility delivers truly integrated and personalised care
System	Greater availability of resources for education and continuing professional and personal development	Technology influences personalised medicine	

Skills Implications

- There is a greater emphasis to support service users in self-management and shared decision-making
- Workforce roles expand to include more generalist skills
- Team-working abilities and communication skills become vital for integrated care
- Education, communication, monitoring and early intervention skills are in demand in primary care, community care and prevention services which are an associated effect on the demand for skills in acute settings.

International Implications

- Would empowered and informed service users benefit internationally to access certain types of skills?
- Which skills may be in greater demand internationally as professional user knowledge of options including cost/impact?

For more information on the Horizon 2035 project please visit www.horizontesting.org.uk

Enterprising service users

This is an overview of the scenario 'Enterprising service users' in which high levels of self-care in the population, widespread adoption of technology across the system, a positive economic environment and low levels of workforce flexibility combine to produce highly specialised, fragmented services. The CWI uses scenarios to consider different futures. Stakeholders involved in the CWI Horizon 2035 programme have created an high-impact, challenging but plausible scenario. They are designed to be tools that aide the testing of future thinking based on the decision-making happening now. These scenarios are not statements of policy or how we or our stakeholders expect the future to unfold.

	Now to 2020	2020 to 2030	2030-2035
Service users	Public health 'self-care' initiatives are launched and include investment in low cost technology diagnostic	The peak adoption of self-care is reached	Those still unable to access self-care may find that complex conditions and diagnosed health care and require more difficult and costly treatment
Workforce	A tension begins to develop between professional opinion and patient opinion as a result of the greater levels of self-diagnosis and 'informal' opinion	Health and care commissioning requires more gathering of data	Health and care is highly specialist yet fragmented
System	High demand on the system	By 2025 more people begin to use private point-of-care diagnostic methods as an entry point to the system	The job of the social care workforce has increased to support self-care in the community and is supported by digital age

Skills Implications

- Will high investment in change, sensors and professions be offset, with little change over the length of the scenario?
- Initiatives to encourage self-care, and the availability of low cost diagnostic tools, make changes to the workforce sector and attitudes needed to deal with differences in professional or public opinion.

International Implications

- Would 'know-how' skills in commissioning be in demand in other health systems?

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Inequality pervades

This is an overview of the scenario 'Inequality pervades' where poor economic growth and slow progress in service innovation combine to dramatically increase health and care inequality and lead to lower levels of workforce retention. The CWI uses scenarios to consider different futures. Stakeholders involved in the CWI Horizon 2035 programme have created an high-impact, challenging but plausible scenario. They are designed to be tools that aide the testing of future thinking based on the decision-making happening now. These scenarios are not statements of policy or how we or our stakeholders expect the future to unfold.

	Now to 2020	2020 to 2030	2030-2035
Service users	Consumers have more choice between private insurance and public services	Educated service users turn to self-care as a last resort, accessing online information and monitoring their own health	The undermined confidence results in high dissatisfaction and feelings of inequality
Workforce	Professional standards may decline leading to a potential for the UK becoming less attractive to high professional	Demand for public services by an ageing population and increasing long-term conditions	Media reports undermine confidence in public services by showing services under increased pressure
System	There is low investment in R&D	Specialist centres begin to emerge	The workforce re-organises into innovative specialist centres to respond to high demand

Skills Implications

- Workforce resilience and adaptability mitigates some capacity gaps in services.
- The ageing workforce rate towards overworking voluntary care requires new skills and competences for the future workforce.
- Health and care workers play a greater role in enabling service users to self-care and self-manage.

International Implications

- Could ageing populations in other countries increase international competition for health and care skills?
- How can countries retain health and care workers under challenging economic conditions?

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The workforce adapts to stagnation

This is an overview of the scenario 'The workforce adapts to stagnation' where a nimble workforce adapts to challenging situations of over-specified services and demotivated service users by bolting generalist skills, developing multi-disciplinary working and specialisation in social care. The CWI uses scenarios to consider different futures. Stakeholders involved in the CWI Horizon 2035 programme have created an high-impact, challenging but plausible scenario. They are designed to be tools that aide the testing of future thinking based on the decision-making happening now. These scenarios are not statements of policy or how we or our stakeholders expect the future to unfold.

	Now to 2020	2020 to 2030	2030-2035
Service users	Service users have high expectations of care. Demand for health and care GROWS due to multimorbidity and ageing	Following pressures on services, patient expectations are adjusted	The public is more at risk of finding a system of inequality in health services
Workforce	Barriers between professions reinforce differences in specialisation and status	Higher demand jobs services under pressure	The workforce adapts to a new process inspired by the third and independent sectors
System	There is a shift towards needs based planning driven by growth in multimorbidity in the population	There is weak engagement between patients and professionals	A more flexible and productive workforce emerges with new roles

Skills Implications

- Responding to futures in care, the workforce has to increasingly manage the expectations of service users.
- While medical professions adopt more generalist skills, the social care workforce becomes more specialised and new roles emerge including advocates and intermediaries to help navigate service users through the system.

International Implications

- Would service users and the workforce become more or less mobile due to the challenging and fragmented environment?
- Would arrangements demand co-operation between very different workforce groups.
- Co-ordinator or 'navigator' roles established in a complex, fragmented landscape.
- Would private sector organisations from abroad increase their presence and drive up competition?

For more information on the Horizon 2035 project please visit www.horizontesting.org.uk

The professionals

This is an overview of the scenario 'The professionals' where high investment in technology and low workforce flexibility lead to a specialised but fragmented system. Overall population wellbeing decreases with service users unable to access self-care and left frustrated by the level of complication in services. The CWI uses scenarios to consider different futures. Stakeholders involved in the CWI Horizon 2035 programme have created an high-impact, challenging but plausible scenario. They are designed to be tools that aide the testing of future thinking based on the decision-making happening now. These scenarios are not statements of policy or how we or our stakeholders expect the future to unfold.

	Now to 2020	2020 to 2030	2030-2035
Service users	There is little focus on supporting self-care and service users are frustrated by the lack of continuity in their care	Patients with complex co-morbidity must interact with many specialists and professionals	The population's health declines overall and long-term conditions increase
Workforce	Professional divisions in health and social care are reinforced	High specialisation and high-variation between services and workloads and slow working	To maintain access, 'towing' teams develop that move specific skills around on a mobile basis
System	To maintain technological advances, specialised training paths develop	Competitive tendering and private interest in health, social and public services	Private and public sector settings co-exist

Skills Implications

- Skills are divided and concentrated around established professions.
- Workforce arrangements demand co-operation between very different workforce groups.
- Co-ordinator or 'navigator' roles established in a complex, fragmented landscape.

International Implications

- Interest from non-UK corporations to tender for UK services may occur in this scenario.
- Could this affect system governance and regulation?

For more information on the Horizon 2035 project please visit www.horizontesting.org.uk

Safety-net services

This is an overview of the scenario 'Safety-net services' where workforce resilience is severely tested. Here, health and care inequality increases dramatically as a tiered system emerges characterised by under-capacity public services that can only passively address the most severe needs, and expanded private provision for the better-off. The CWI uses scenarios to consider different futures. Stakeholders involved in the CWI Horizon 2035 programme have created an high-impact, challenging but plausible scenario. They are designed to be tools that aide the testing of future thinking based on the decision-making happening now. These scenarios are not statements of policy or how we or our stakeholders expect the future to unfold.

	Now to 2020	2020 to 2030	2030-2035
Service users	Demand for health and care rises due to ageing and multimorbidity	More employers offer private healthcare alternatives to their staff	The population begins to change its attitudes towards their own health of the public, especially for those conditions leading to changes in behaviours
Workforce	A workforce capacity gap as retirements and growth	Constraints begin to have varying impacts on patient outcomes	The workforce is spread across private, public and third actors
System	There are resource constraints for health and care	Potential taxation on sugar, alcohol and smoking introduced	Consumers have more choice between private insurance and public services

Skills Implications

- The health and care system overall increasingly depends upon the resilience of the workforce.
- The workforce role of gatekeeper to publicly funded services becomes more important. This requires further skills in assessment, needs testing, and making cost-benefit judgements.

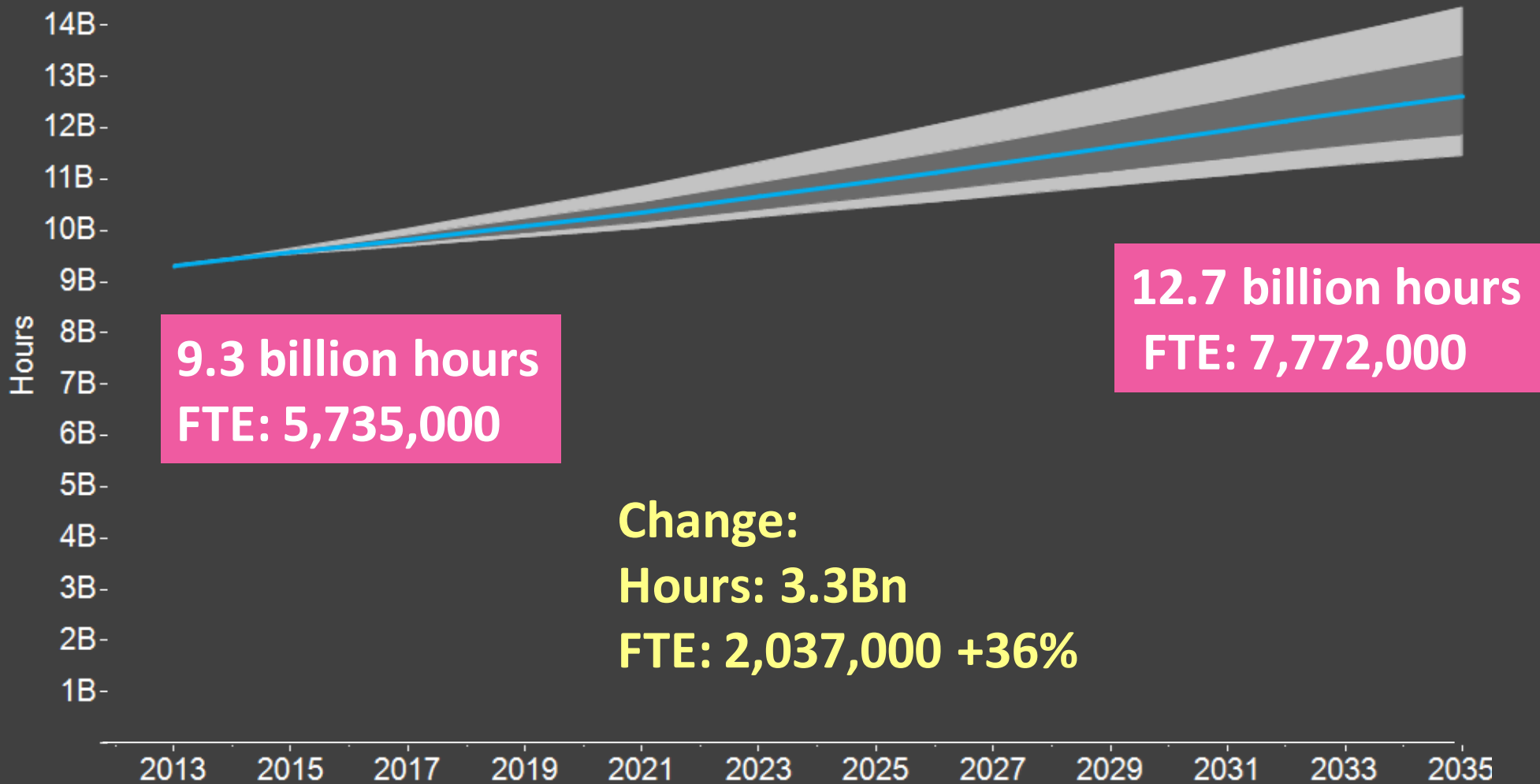
International Implications

- Would those patients that can afford it choose to get their treatment abroad?
- Could a lack of opportunities increase workforce emigration?

For more information on the Horizon 2035 project please visit www.horizontesting.org.uk

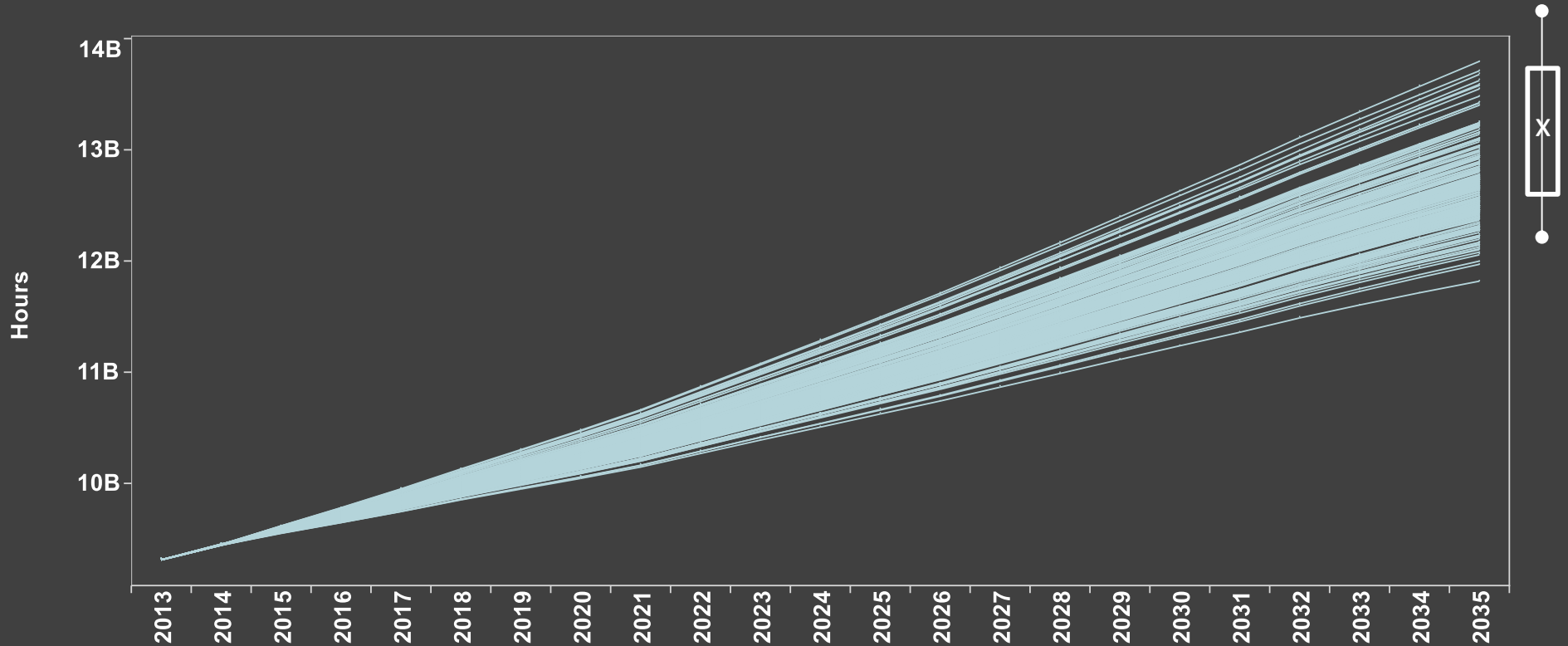
How does skills demand change?

Reference future



How does skills demand change?

Monte Carlo simulation



Change in demand

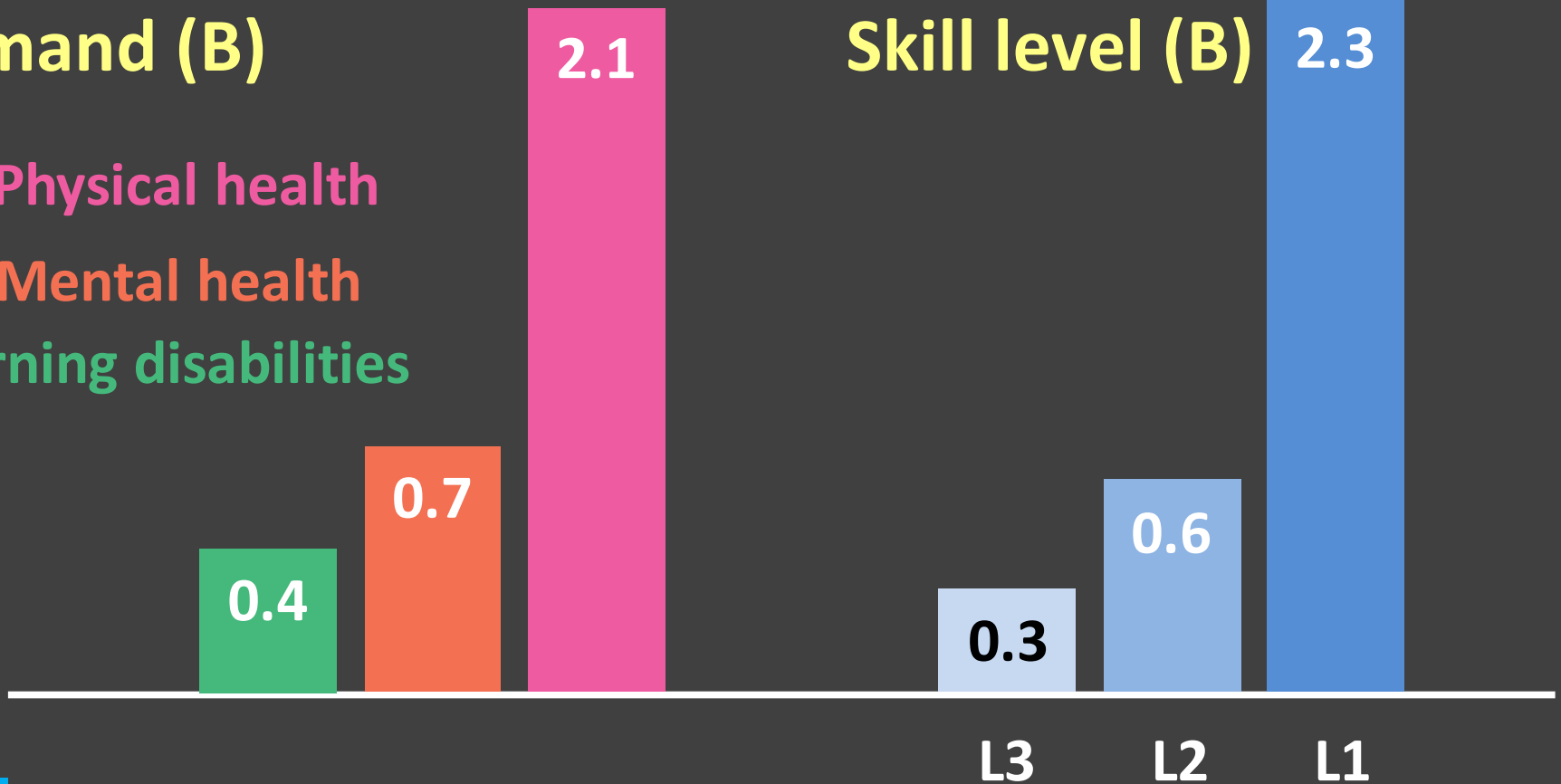
Demand (B)

LTC Physical health

LTC Mental health

Learning disabilities

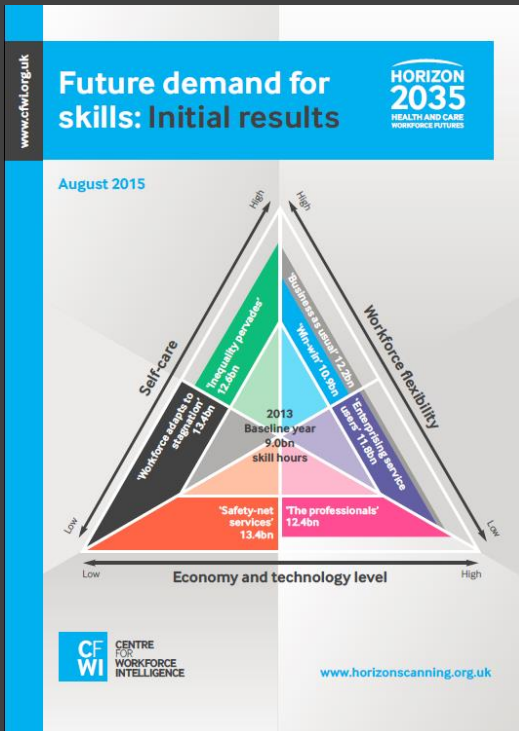
Skill level (B)



Next steps

1. Multi-scale scenarios and reuse.
2. **Probability of scenarios?**
3. Presenting findings to policy makers.

More information



Horizon 2035

Future demand for skills: Initial results

<http://www.cfwl.org.uk/publications/horizon-2035-future-demand-for-skills-initial-results>

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