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Systems thinking in workforce planning

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Systems thinking

- A set of tools through which to approach the longer-term analysis of a system.
- Particularly how the elements within a system interrelate and influence each other.

The following approach applies systems thinking to workforce analysis and is informed by Frederic Vester, who argued for alternative approaches to considering futures in complex systems:

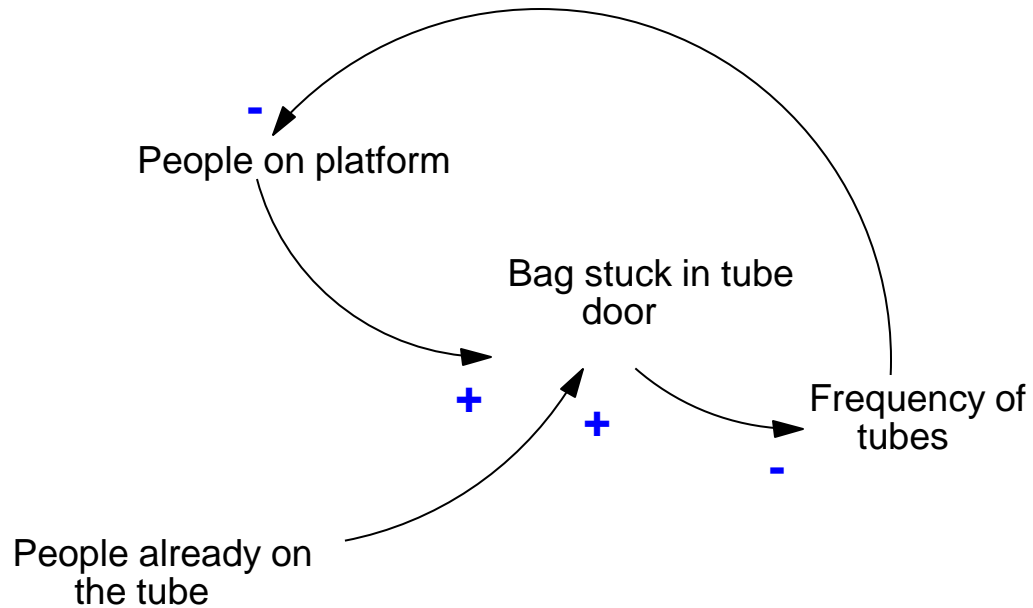
‘We want to know what events will occur, but we look outside instead of concentrating on the system itself and how it is going to behave’

Vester (2012) *The art of interconnected thinking*.

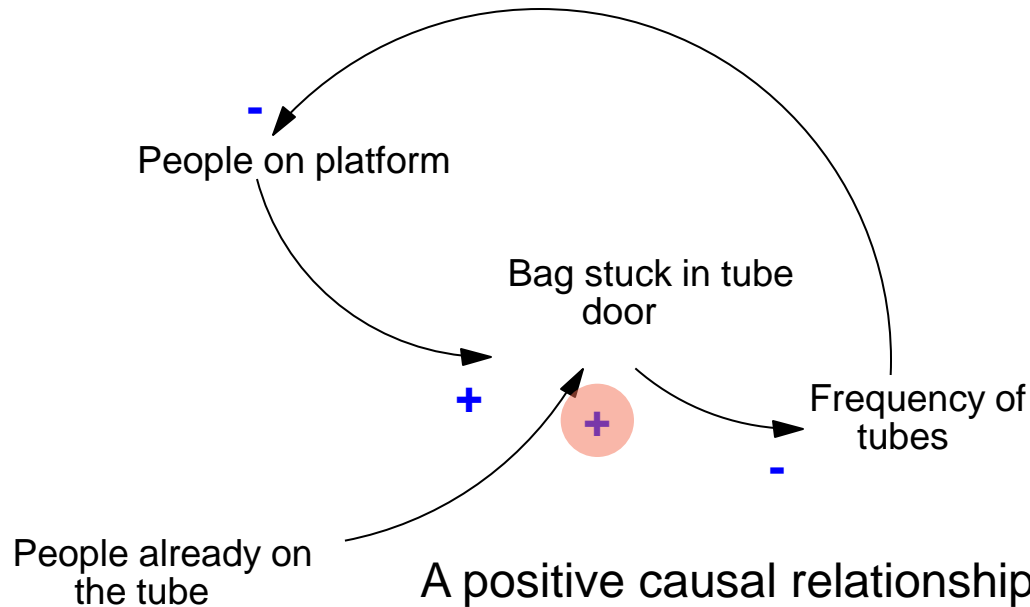
A non-workforce example – London Tube



System mapping



System mapping

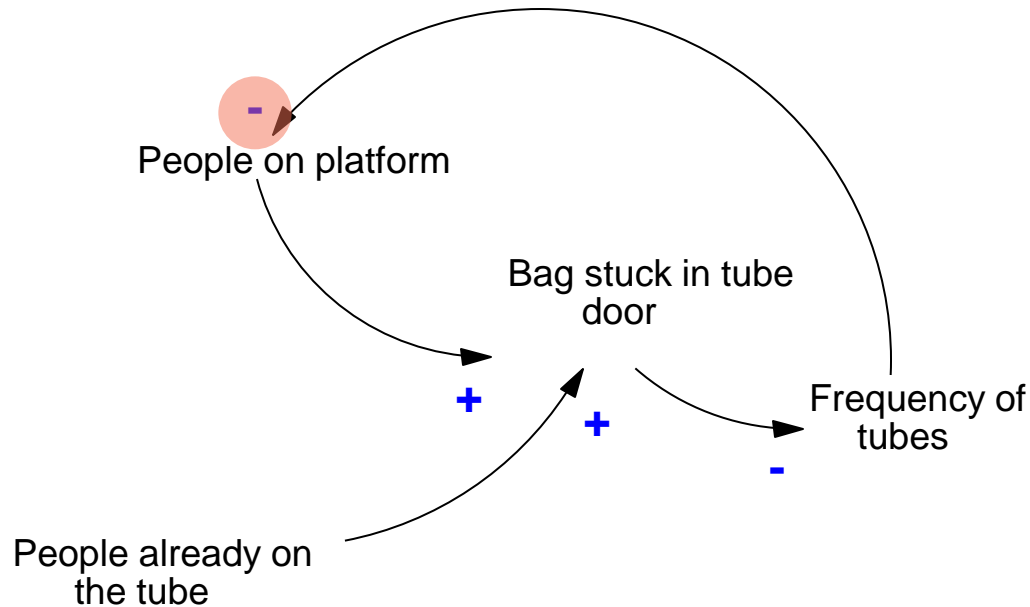


A positive causal relationship is shown as a +

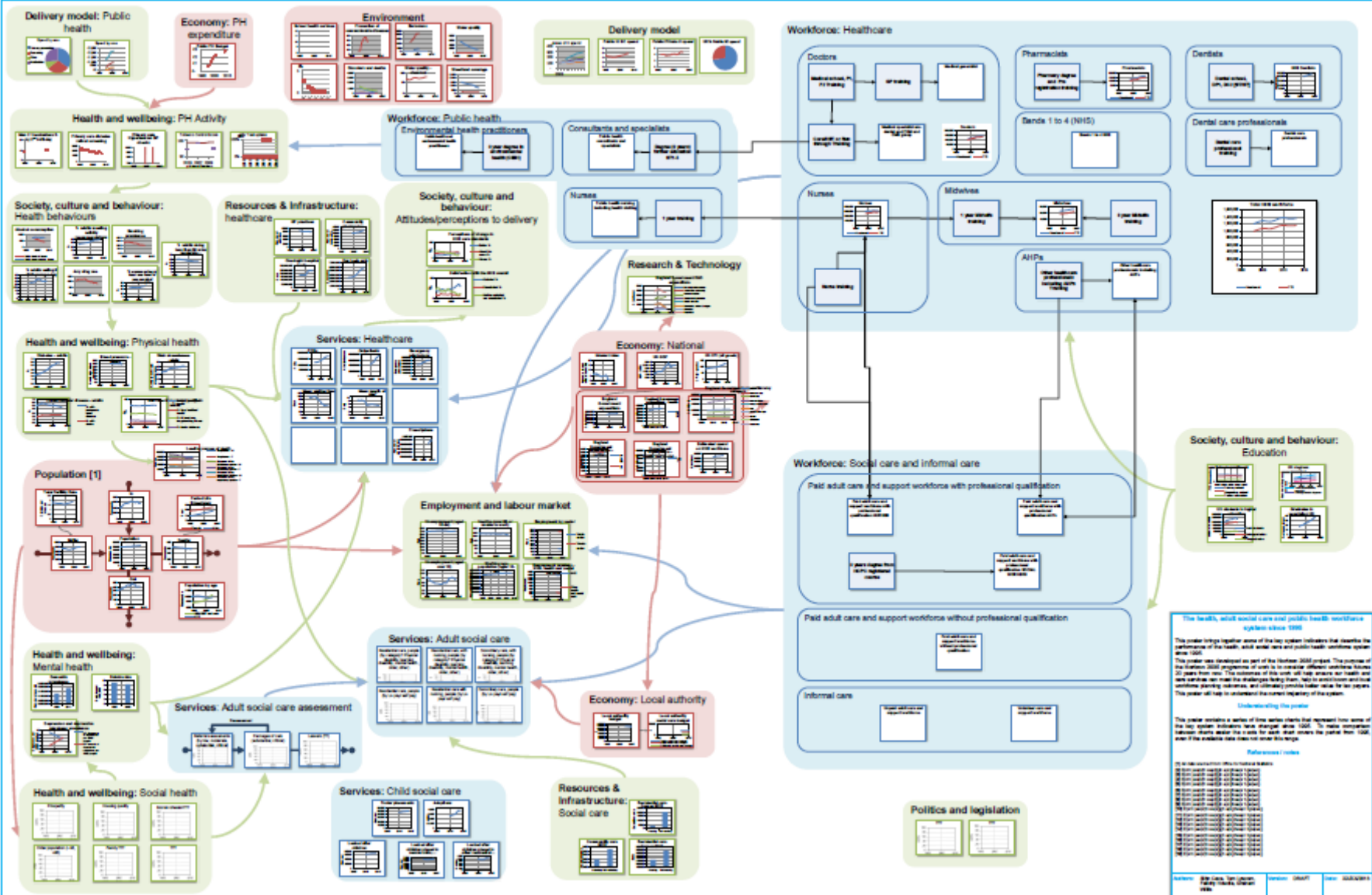
The variable at the tail of the arrow produces a change in the same direction, or adds to the variable, at the head of the arrow.

System mapping

In negative causal relations (-) the variable at the tail of the arrow produces a change in the opposite direction, or subtracts from the variable, at the head of the arrow.



The health, adult social care and public health workforce system since 1995



The health, adult social care and public health workforce system since 1995

This poster brings together some of the key system indicators that describe the performance of the health, adult social care and public health systems since 1995. The poster was developed as part of the Horizon 2035 project. The content of the Horizon 2035 programme of work is to create a shared evidence base for the health and social care system. This evidence will help us to understand our health and social care system and the challenges facing it, help to set common and realistic performance targets, and identify priority areas for the system. The poster will be used to communicate the current trajectory of the system.

Understanding the poster

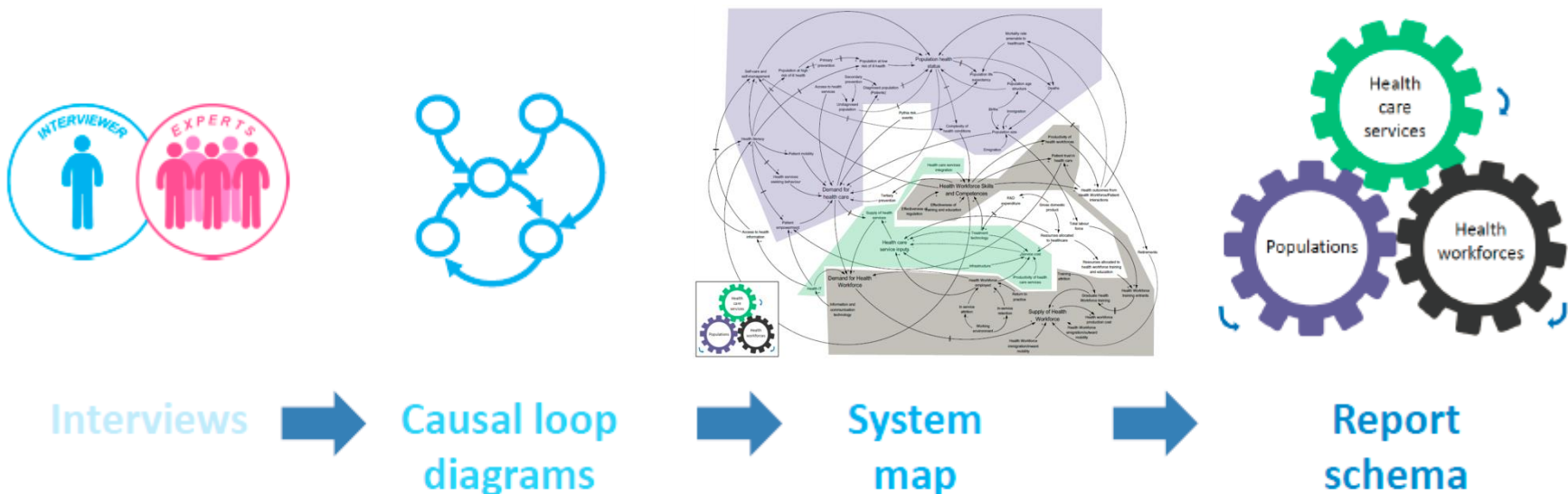
The poster contains a series of line series plots that represent five areas of the key system indicators that changed since 1995. To make comparison between charts, within the same chart, each chart covers the period from 1995 until the earliest date shown on the chart.

References / notes

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Horizon scanning for the EU JA

Focal question: ‘Thinking up to the year 2035, what are the key driving forces that will influence the skills and competences required in the health workforce?’





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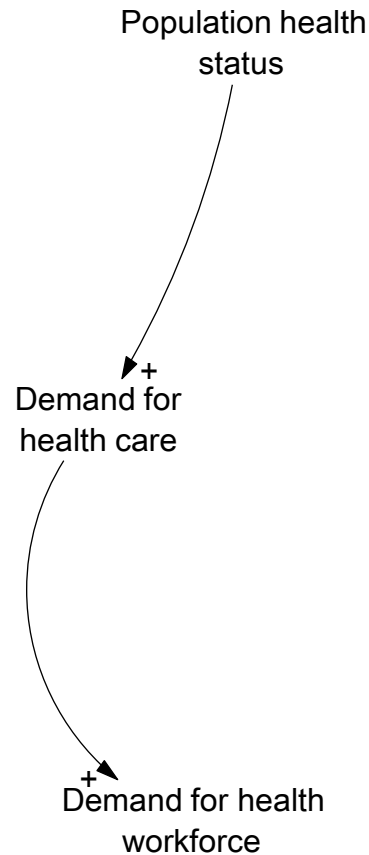


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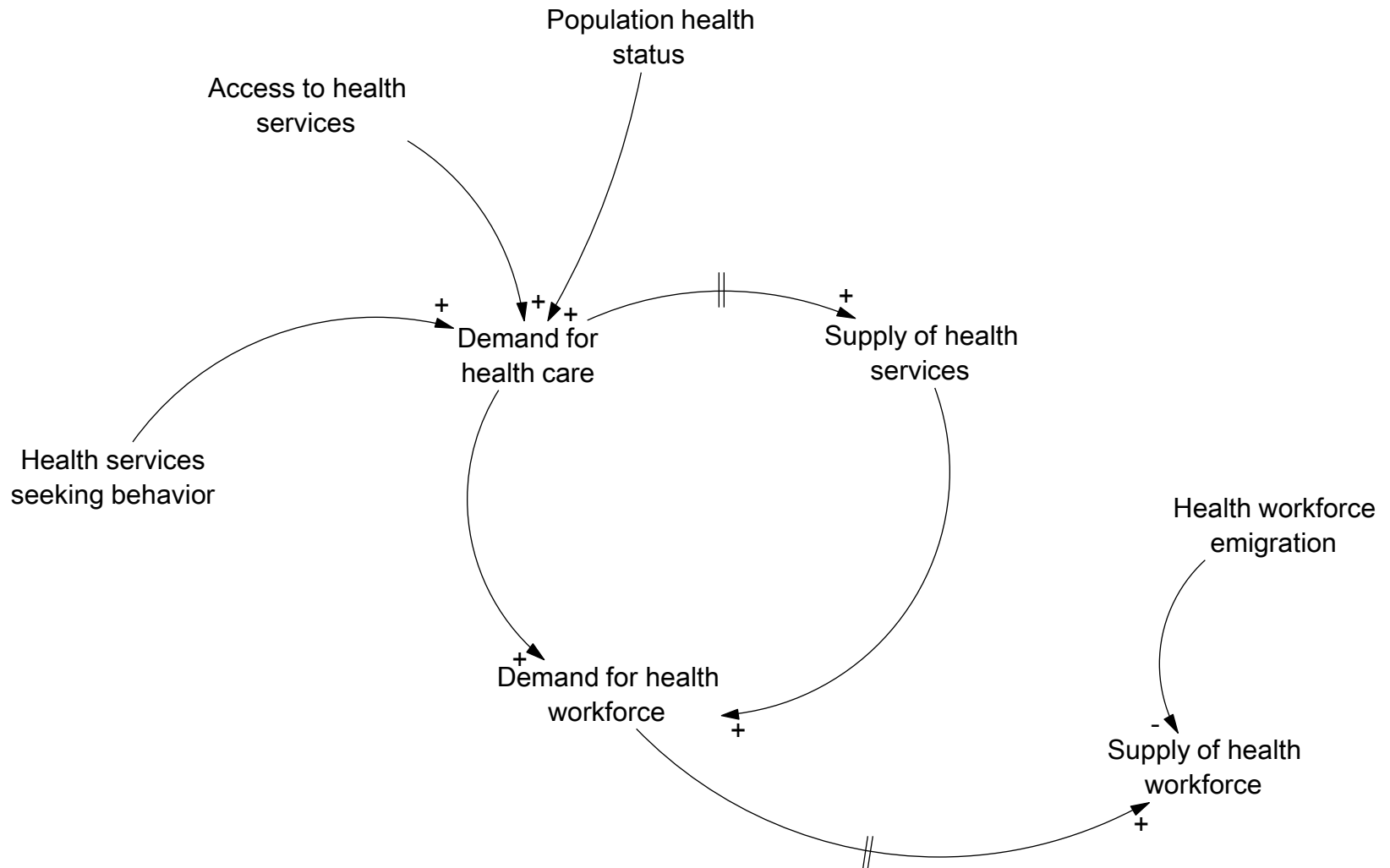
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System mapping supply and demand



An important concept which has informed the system map is approaching the demand for healthcare as a derived demand (McGuire et al, 1989).

Further to this, 'demand for health workers is derived from the demand for health care, in turn derived from the demand for health' (McPake et al, 2014).

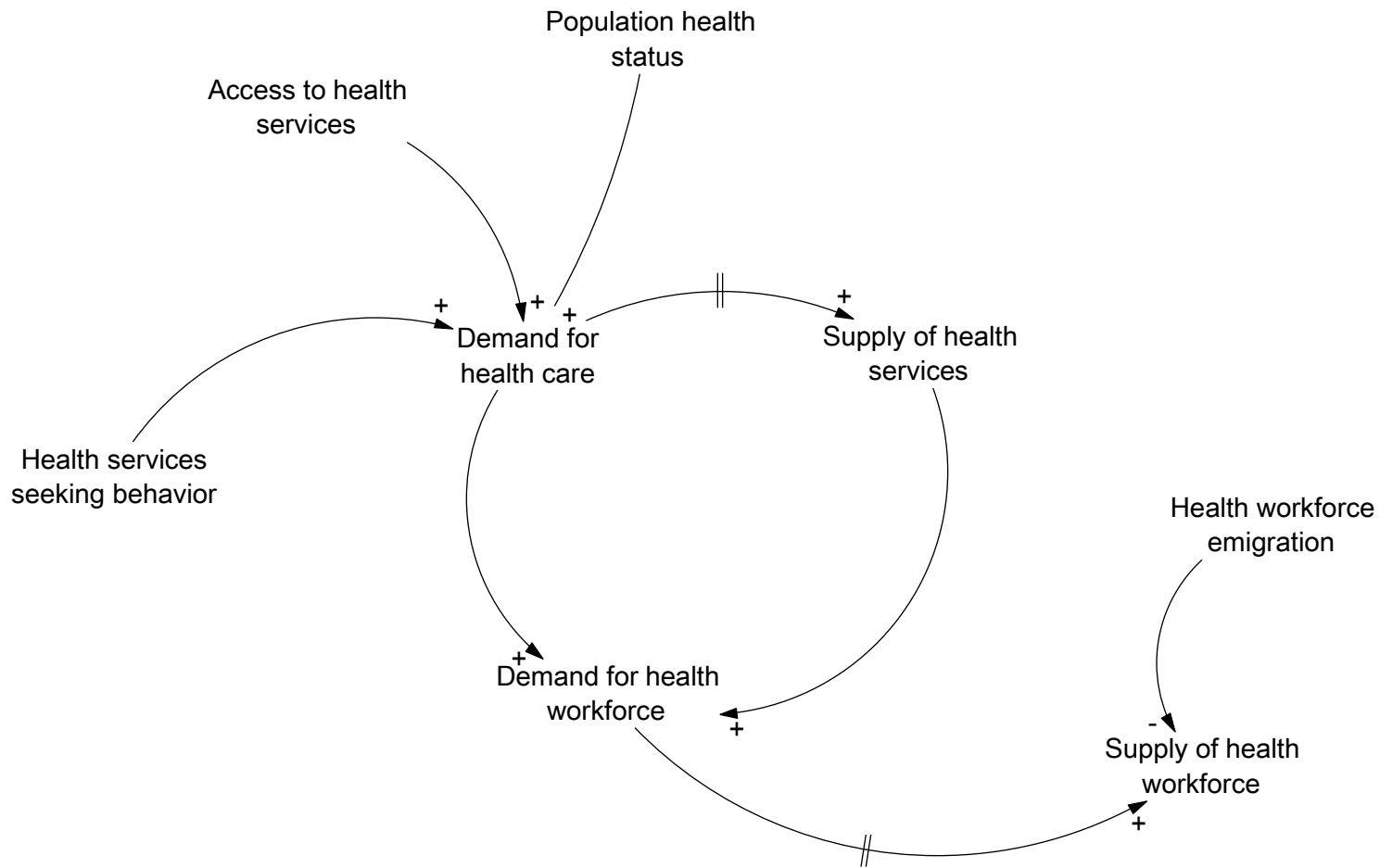


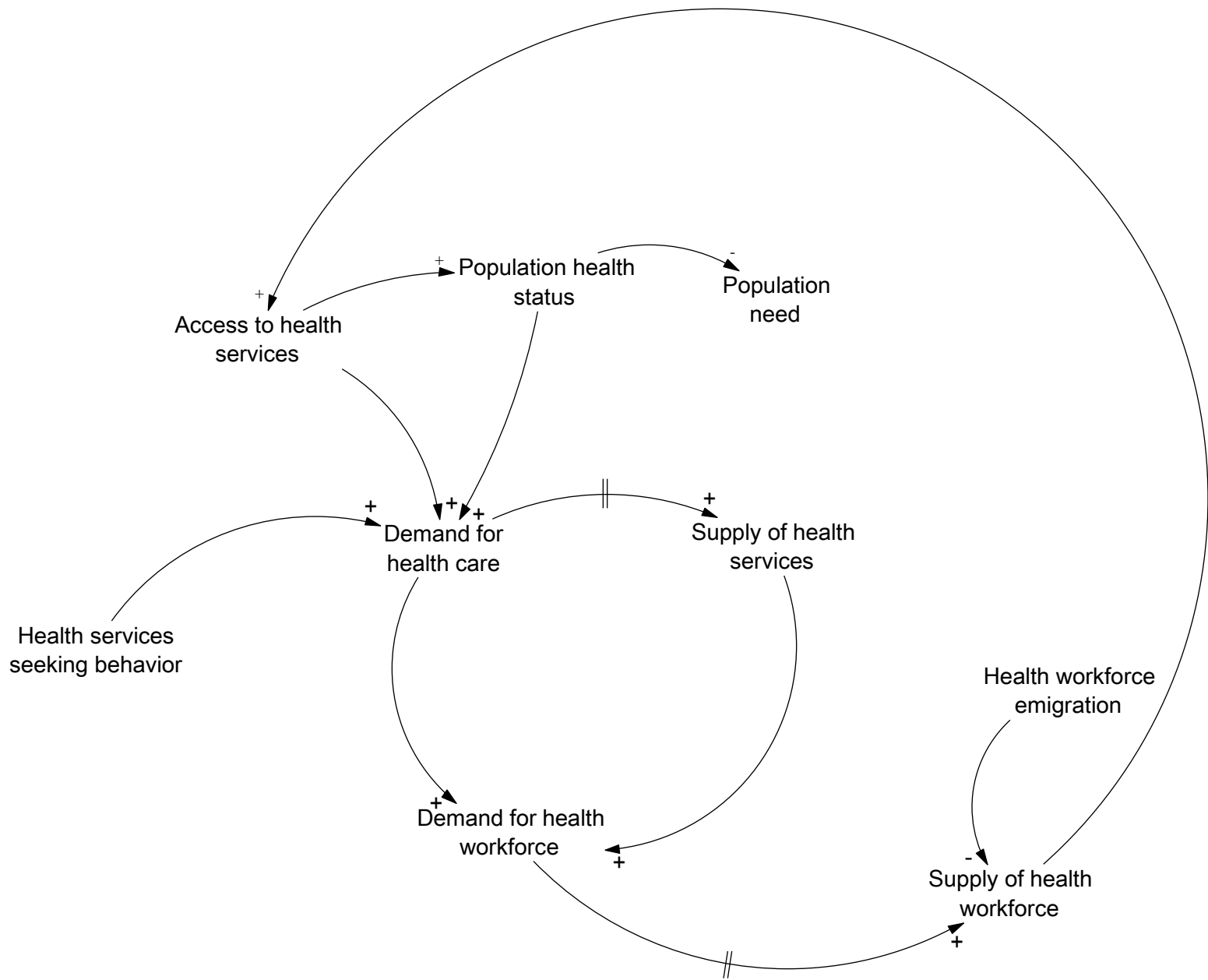
Adding variables: an example

‘Universal health coverage and guaranteed global health security are only possible with adequate investment in the health workforce.

Health workforce shortages are increasing the inequities in access to health services, causing preventable illness, disability and death, and death, and threatening public health, economic, growth and development, as starkly demonstrated by the Ebola outbreak in West Africa.’

High Level Commission on Health Employment and Economic Growth (2016) *Working for health and growth*.







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Exercise: Adding variables to the system map

Exercise

Individual exercise:

Consider your topics of concern and add variables to your system map, linking them.

Group exercise:

Explain your system map in small groups

Ground rules

- No right or wrong answers, only differing points of view.
- One person speaking at a time.
- Chatham House rules (facilitators may take notes, but will not attribute comments).
- You don't need to agree with others, but you must listen respectfully as others share their views.
- Talk to each other as part of the discussion, insight is generated through interaction between participants.