Principles of decisions making at NICE

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Outline

- International context
- What the literature gives us
- Framework for NICE decision making
  - Simple world: all costs fall on NHS
  - More complex world: some effects outside NHS
- Considerations in selecting an appropriate perspective

What do we learn from international comparison?

Payer	Societal	Both	Not stated
13 (50%)	6 (23%)	6 (23%)	1 (4%)

Acknowledgements: Marco Barbieri

Absence of clear rationale for selected perspective

- 50% of guidelines offer no rationale for their preferred perspective

"There is broad consensus nationally and internationally that the societal perspective is the most appropriate choice." (Netherlands)

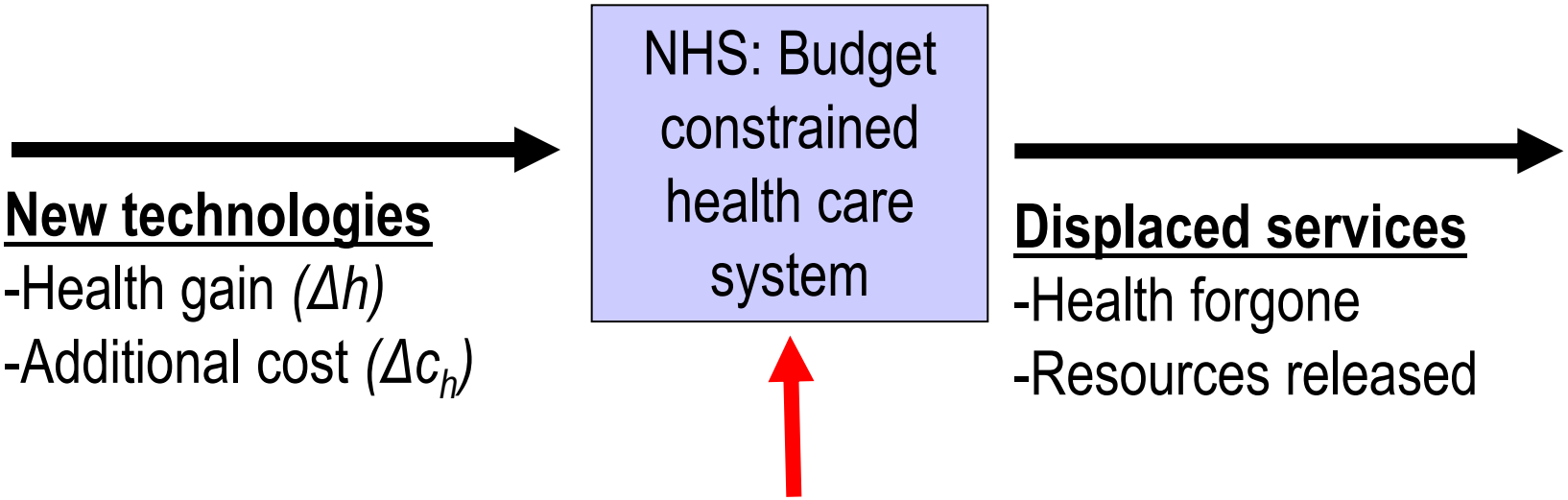
"The perspective chosen should fit the needs of the target audience." (Canada)

- 27% (7/26) make reference to a budget constraint

Does the theoretical literature help us?

- Normative foundations of economic evaluation – two broad paradigms
- Neo-classical welfare economics ('Welfarism')
  - Prescriptive framework for social choice
  - Application in terms of cost benefit analysis
  - Little consideration of budget constraints and consequent opportunity costs
- 'Non-Welfarist' approaches
  - Other outcomes can be considered other than just preferences
  - Less prescriptive – legitimacy comes from political and administrative system

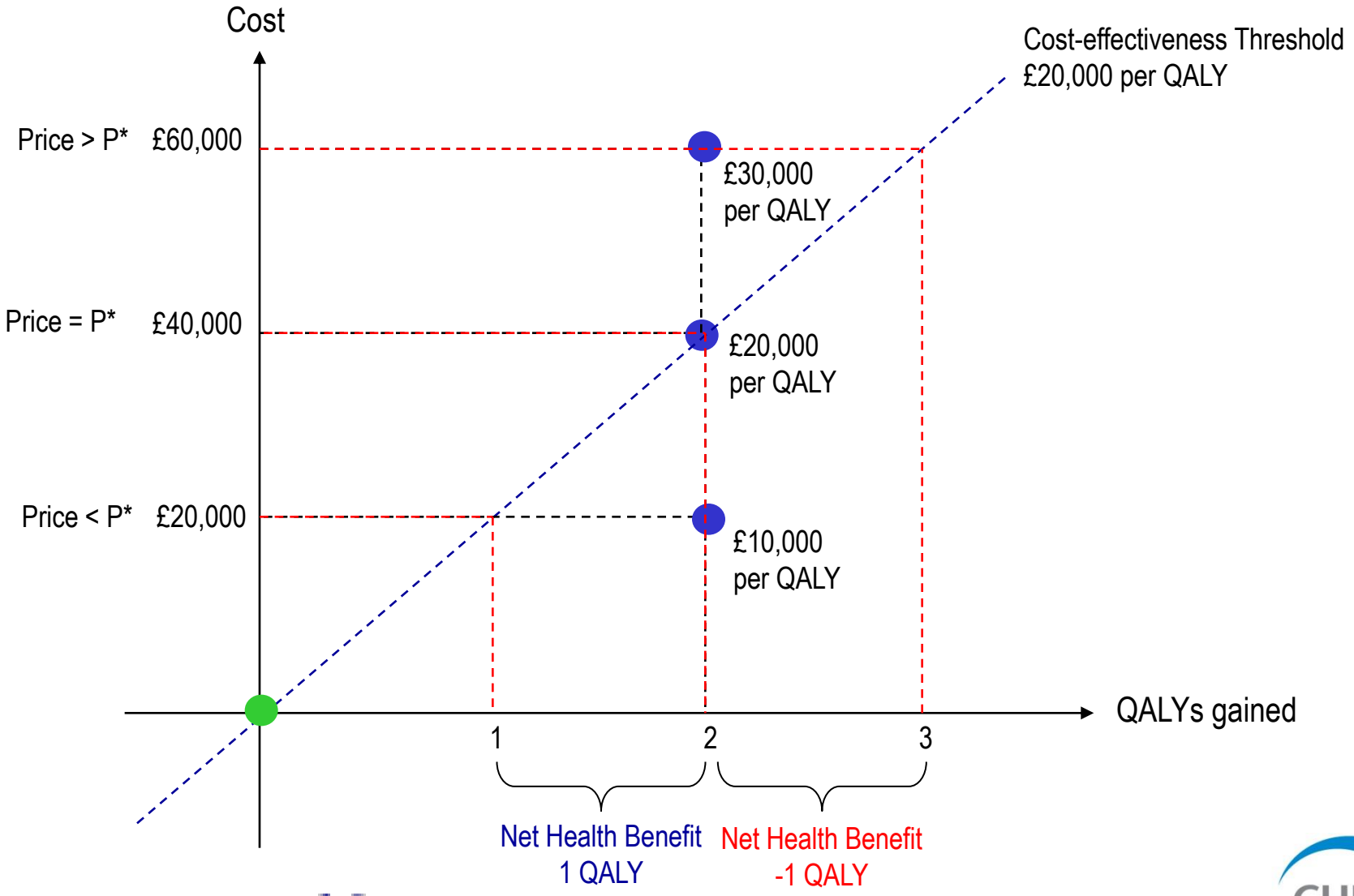
A simple world: NHS budget constraint and health maximisation



Cost-effectiveness threshold *(k)*

- additional cost that would displace 1 unit of health

The role of the threshold?



Claxton *et al. British Medical Journal* 2008;336:251-4.

Decision rules

$$\frac{\Delta c_h}{\Delta h} < k$$

Incremental cost effectiveness ratio

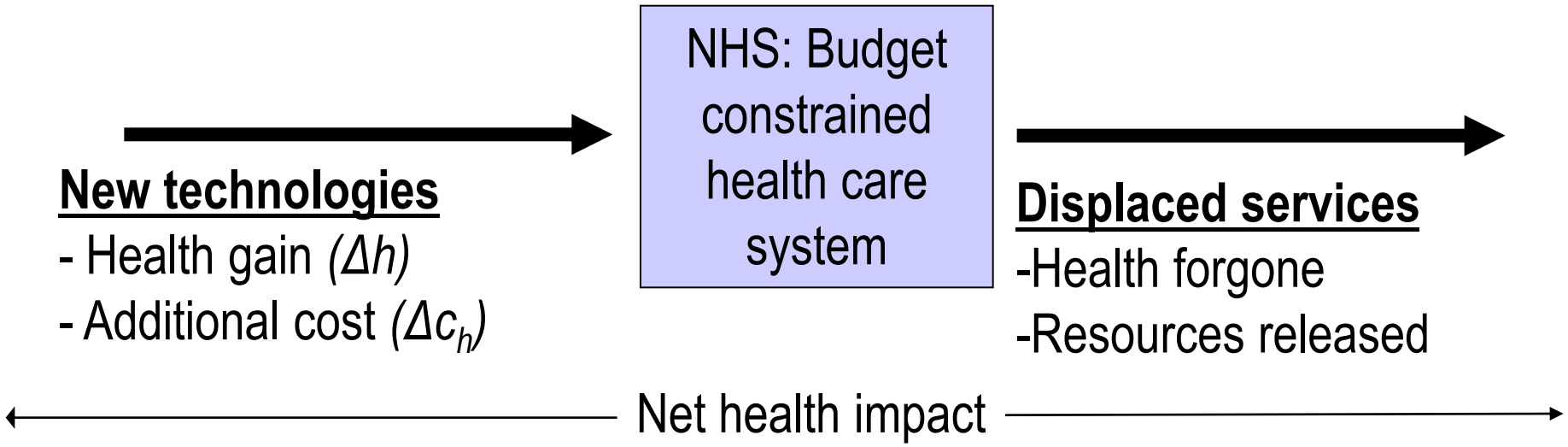
$$\Delta h - \frac{\Delta c_h}{k} > 0$$

Net health benefits

$$k.\Delta h - \Delta c_h > 0$$

Net monetary benefits

More complex world: effects falling outside the NHS



- Non NHS direct costs/saving
- Indirect costs/savings economy
(e.g. production net of consumption)

Δc_c

Consumption value of health *(v)*

- Consumption considered equivalent to one unit of health

More general decision rule

$$v \cdot \left[\Delta h - \frac{\Delta c_h}{k} \right] - \Delta c_c > 0$$

Accept technology if the net consumption value is positive

$$v \cdot \left[\Delta h - \frac{\Delta c_h}{k} \right] - \Delta c_c > 0$$

If $\Delta c_c = 0$ the decision will be same as 'standard' decision rule regardless of v

$$\left[\Delta h - \frac{\Delta c_h}{k} \right] - \frac{\Delta c_c}{v} > 0$$

Accept technology if net health gained in health sector is greater than the health equivalent of net consumption costs

What questions are posed?

- Measurement issues:
  - Where do we get *v* from?
  - Can we specify all the trade-offs?
  - Do QALYs already include (some) consumption effects?
  - How do we measure productivity effects?
- Displaced services can also have wider effects
- Long-term dynamic effects