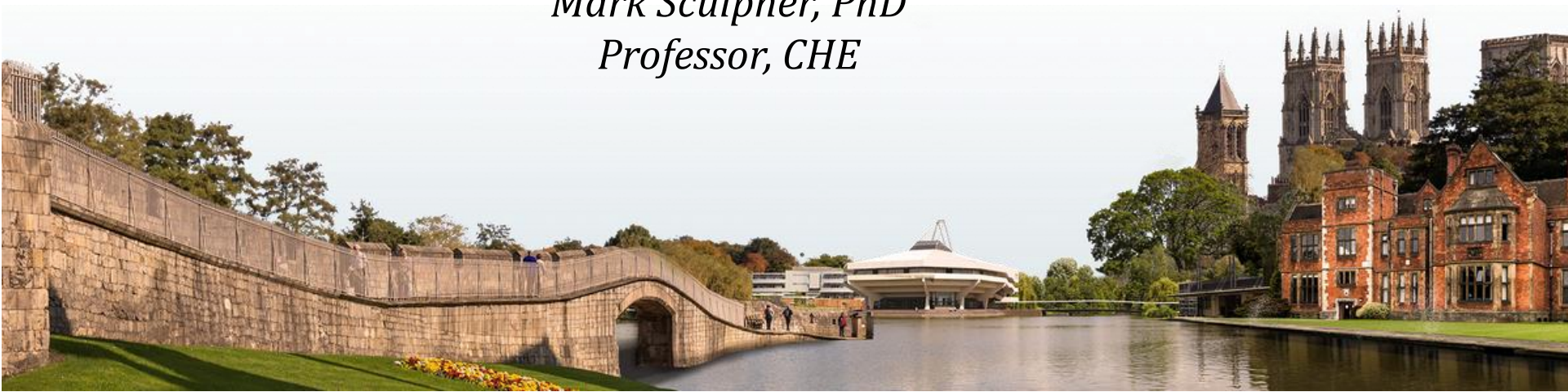


Online Advanced Methods for Cost-Effectiveness Analysis

Presentation 2: Planning and Conceptualising an Economic Evaluation 2.3: Methods

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Objectives

- Understand the core principles and methods to be employed
- Appreciate the choices to be made regarding perspective
- Differentiate health and non-health outcomes

Core principles

Appropriate specification of decision problem

- See Presentation 2.2

Reflect all evidence

- No selective use of evidence
- Clear justification for choices
- Replicable if not comprehensive

Select time horizon over which costs and benefits could differ between options

- Will be lifetime if mortality differs
- Decision makers may consider shorter period, but implications should be reflected

Capture uncertainty and relate to decision

- Analysis to show likelihood of an option being cost-effective
- Consider all sources of uncertainty

Reflect heterogeneity

- Sub-group economic analysis
- Failure to reflect will reduce outcomes

Different views on perspective

Theoretical societal perspective

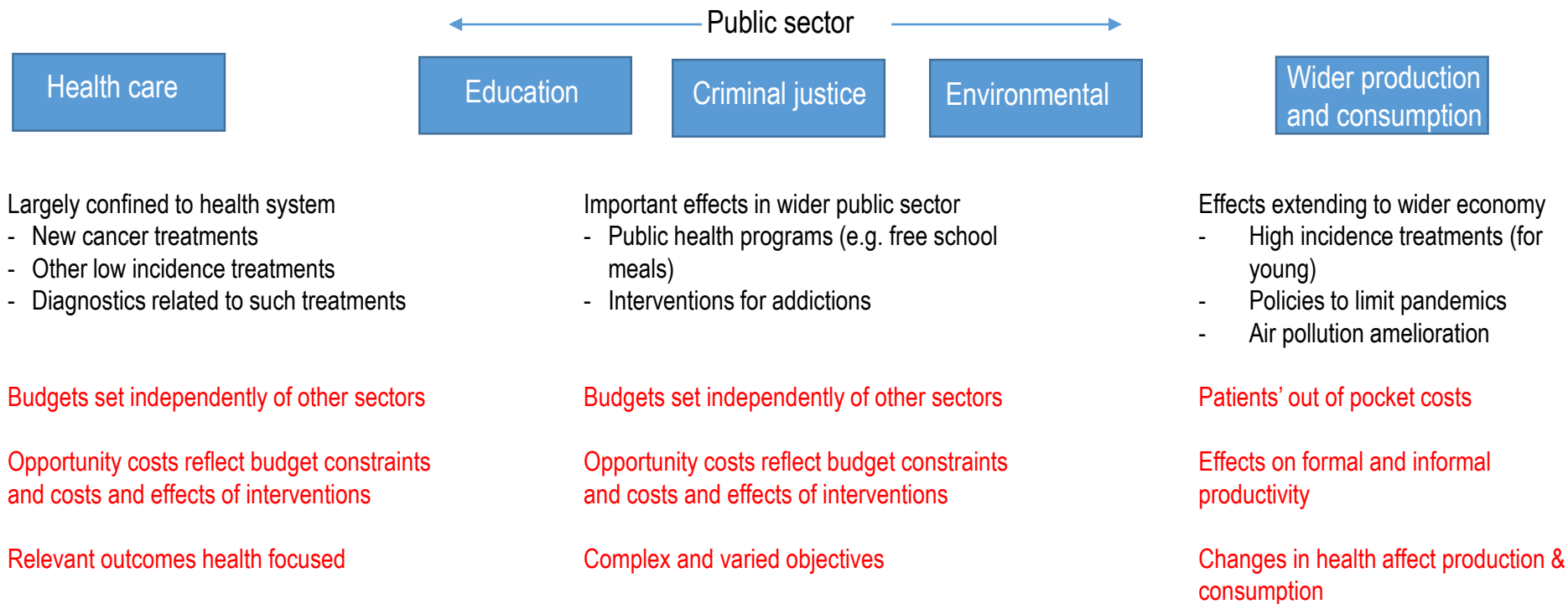
- Linked to 'textbook' cost-benefit analysis
- Budgets reflect social preferences that can be measured
- Hence budgets are 'efficient'
- Budgets are flexible
- Outcomes should reflect social preferences
- See: Jonsson B. *European Journal of Health Economics*. 2009;10:357–9.

A practical societal perspective

- Budgets are set based on a range of political considerations
- Budgets do not have a measurable relationship with social preferences
- Budgets are slow to adjust
- Outcomes should reflect decision makers' responsibilities
- See: Walker *et al. Applied Health Economics and Health Policy*. 2019 17:577–90.

Note: budgets may be interpreted as 'funding rules' in some systems (e.g. USA)

The knotty issue of perspective and outcomes



The analyst's decision on perspective

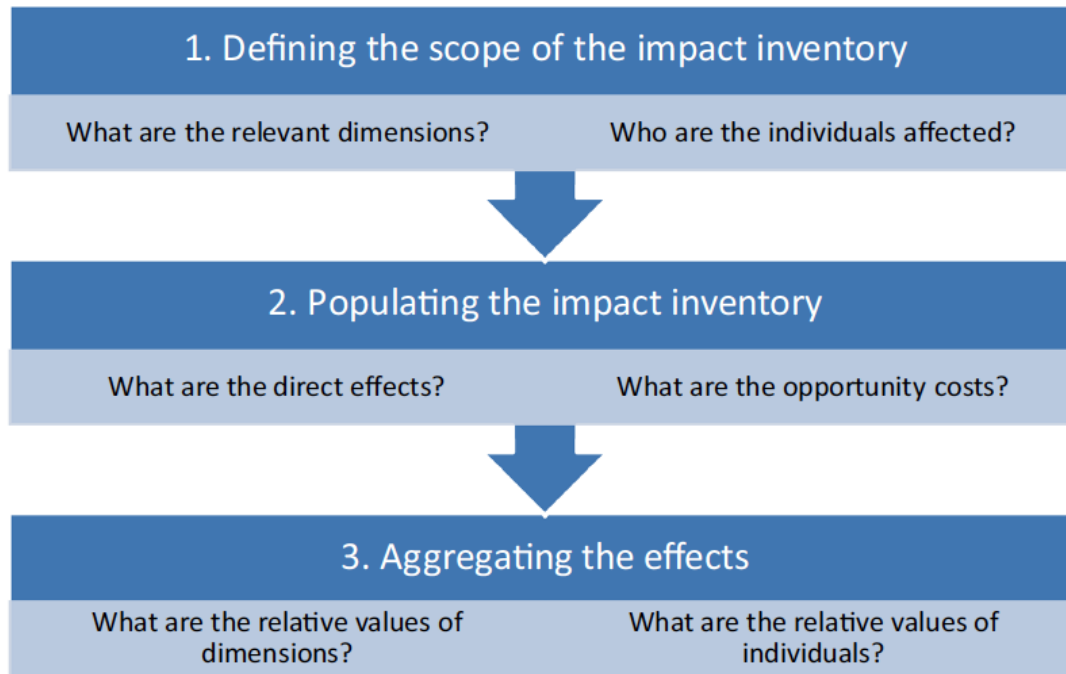
Analysis for a specified decision maker

- Likely to be a preferred perspective
- Primary (reference) analysis follows preference
- Try to give some focus to other costs and effects
- Qualitative vs quantitative vs aggregated
- Peer review should require this

Analysis without a specified decision maker

- Set out to capture all important effects
- Qualitative vs quantitative vs aggregated
- Primary analysis may still be from narrow perspective
- Strive for fuller aggregated analysis

The impact inventory



Outcomes outside health

- Some project will have potentially significant effects outside health care
- Other parts of public sector (e.g. education, criminal justice)
 - Less work on a composite, generic outcome
 - Have to identify with decision-makers
- Wider economy
 - Quantify productivity and consumption effects

Summary

- Core principles apply to all studies
 - Recognize constraints on time and people
- Main methods selection issues relate to perspective and outcomes
- Many studies are constrained by funder, decision maker etc.
- Analyst should seek to reflect all important costs and effects
 - At least qualitatively
- Health is inevitably the focus of relevant outcomes in health care
 - Trade-offs contested
- Outside health care, less definition of outcomes
 - Needs close collaboration with relevant decision-makers