Time Horizons in Models: A Decision-Maker’s Perspective

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Summary

- Decision-making
- Accounting for uncertainty
- Differentiating between effects and consequences
- Barriers to uptake
Decision-making

- All models are wrong, etc.
- ICERs from models are one single factor in the process
- What is the question that we’re asking?
ICERs over time
ICERs over time
Now... and then

Pay today

Benefits

Cheap alternative?

Disease mutation?

Cure?
Reflecting uncertainty

- Never really captured in sensitivity analysis (deterministic or probabilistic)
- Discount rates?
- But… these are consistent across all therapeutic areas
- Greater uncertainty → higher discount rates?
- What will the value of \( \lambda \) be in 40 years’ time???
Effects and consequences

- Extrapolating the effectiveness of therapies introduces substantial uncertainty
  - Not always adequately captured through sensitivity analysis (very mathematical in approach)

- The *consequences* of an effect are usually more certain – and will often be long-term
  - e.g. a death averted in the short-run will have long-term consequences on QALYs

- Sometimes, effects and costs are constant
Barriers to uptake

- Even when interventions are cost-effective in the long-run, uptake is slow (or non-existent)
- Incentives to local decision-makers
- Short-term budget goals
- Being transparent about results at different time points can help this discussion
Barriers to uptake
Barriers to uptake
Summary again

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Thank you

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