

# QALYs and the 'QALY problem' in PC

1. **Idea of the QALY**
2. **'QALY problem' in Palliative Care**



# QALYs and the 'QALY problem' in PC

1. **Idea of the QALY**
2. 'QALY problem' in Palliative Care

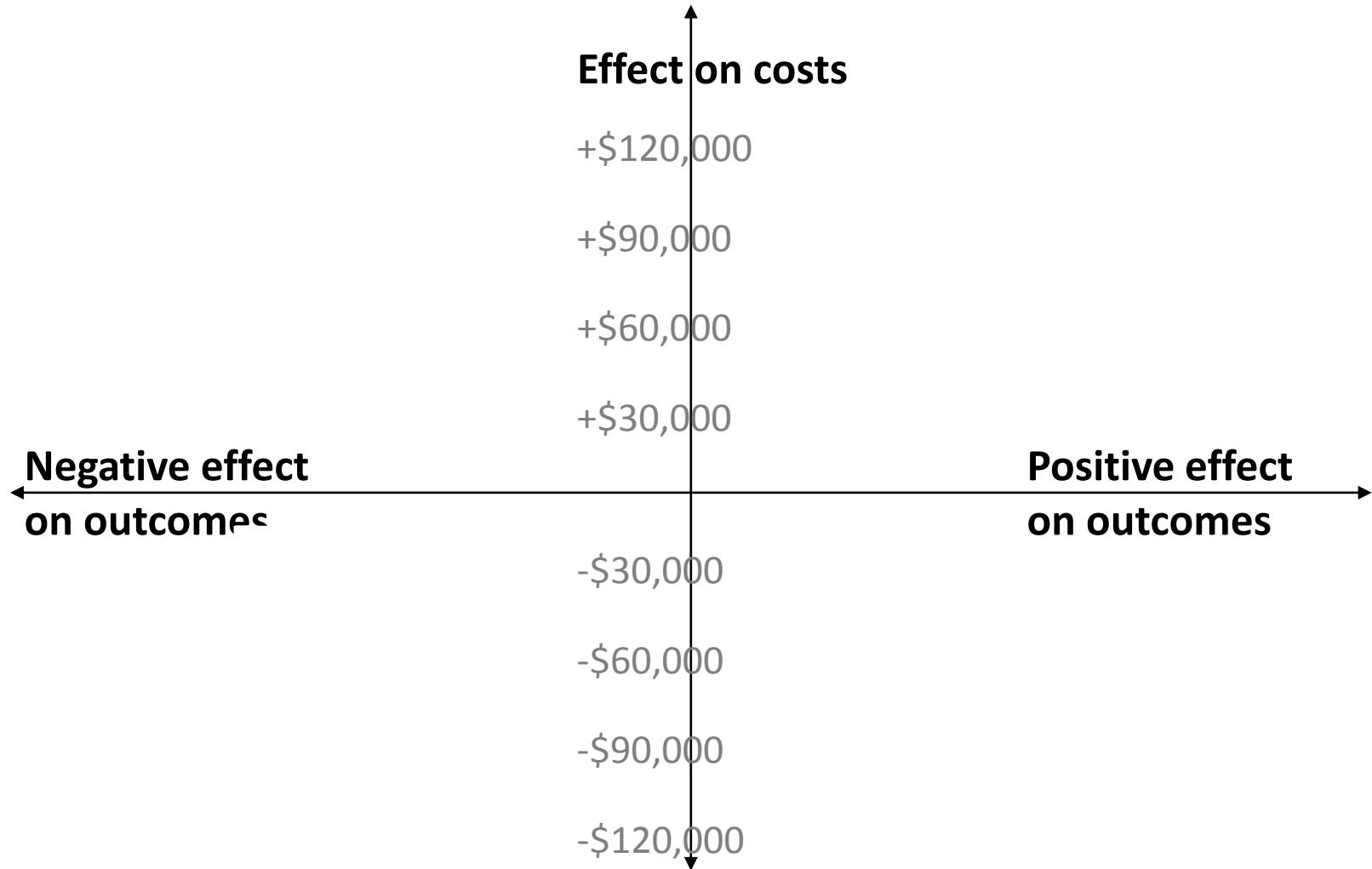


# Idea of the QALY

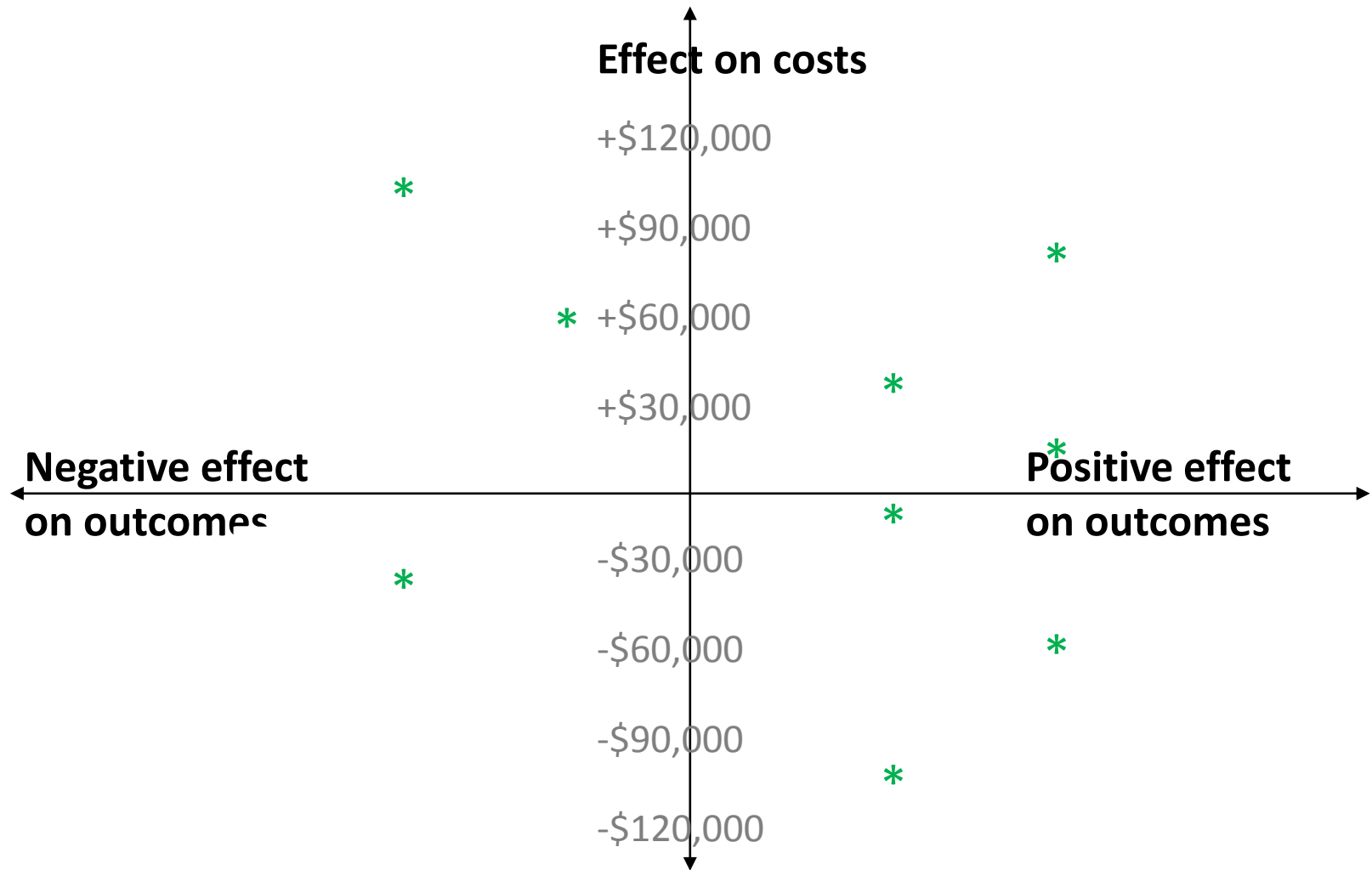
- In a single payer system, e.g. NHS in United Kingdom, the payer aims to maximise health and health improvement across the population subject to 'scarcity' (i.e. resource constraints).
- How do you choose what to pay for within any given budget?
- In particular, how is the consequence part of cost-consequence analysis measured?
  - Easy to specify a bilateral comparison of the two treatments have the same goal, e.g. ibuprofen and paracetamol
  - But how do you compare the effectiveness of, say, hip replacement surgeries versus child vaccinations? Allocating the whole NHS budget requires a vast number of such comparisons



# Idea of the QALY



# Idea of the QALY



# Idea of the QALY

- In a single payer system, e.g. NHS in United Kingdom, the payer aims to maximise health and health improvement across the population subject to 'scarcity' (i.e. resource constraints).
- How do you choose what to pay for within any given budget?
- In particular, how is the **consequence** part of cost-consequence analysis measured?
  - Easy to specify a bilateral comparison of the two treatments have the same goal, e.g. ibuprofen and paracetamol
  - But how do you compare the effectiveness of, say, hip replacement surgeries versus child vaccinations? Allocating the whole NHS budget requires a vast number of such comparisons
    - » Effectiveness on HRQOL & survival effects



# Idea of the QALY

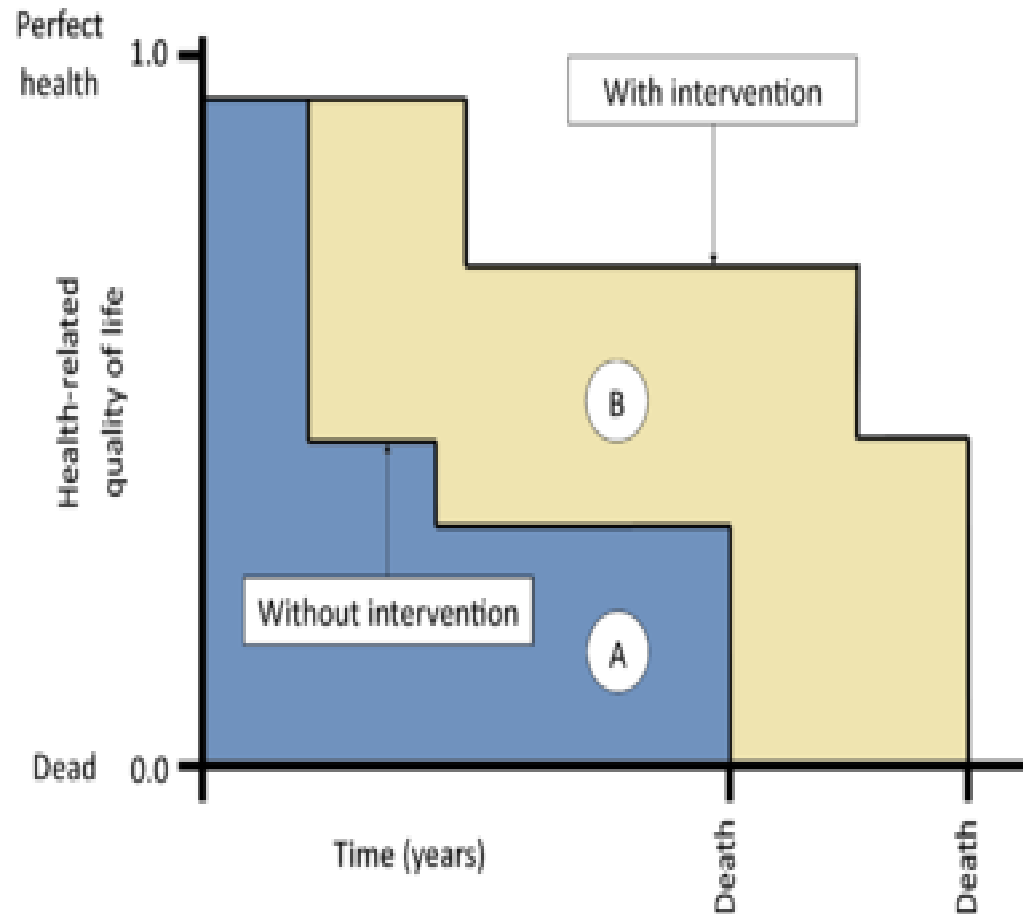
How is the **consequence** part of cost-consequence analysis measured?

This is the problem the

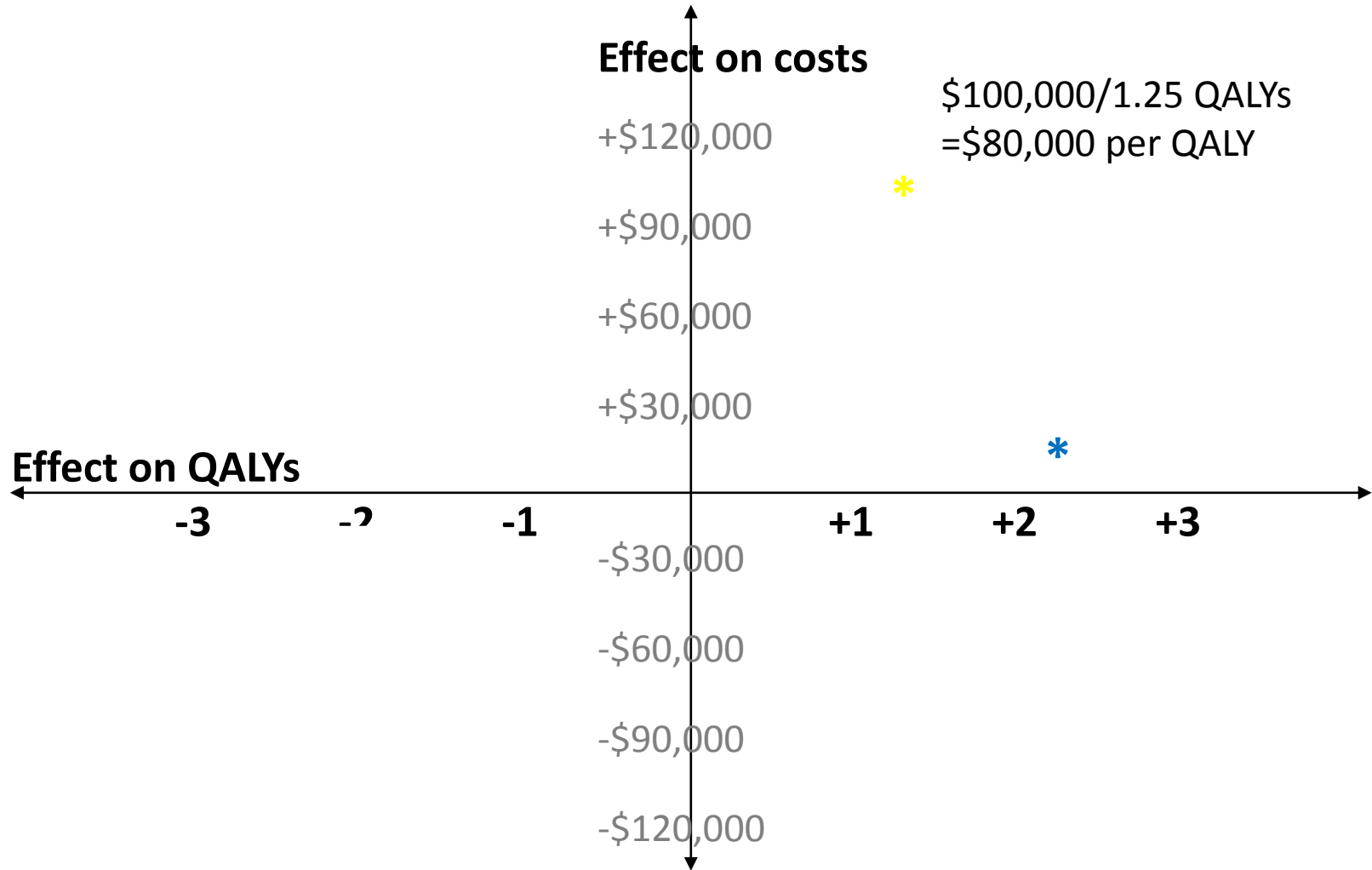
**Quality-  
Adjusted  
Life  
Year**

is intended to solve:

A **generic** measure combining HRQOL and survival

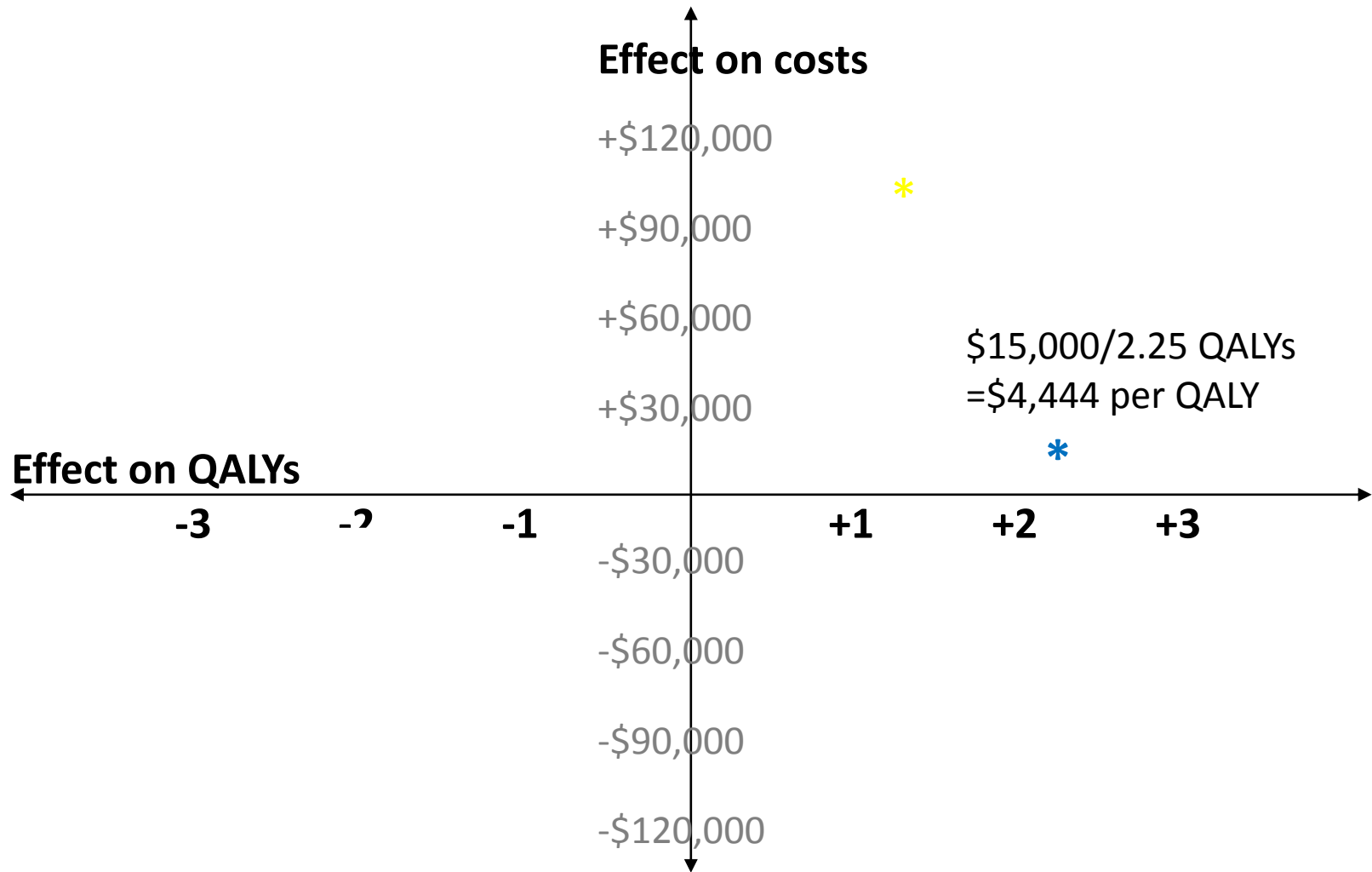


# Idea of the QALY

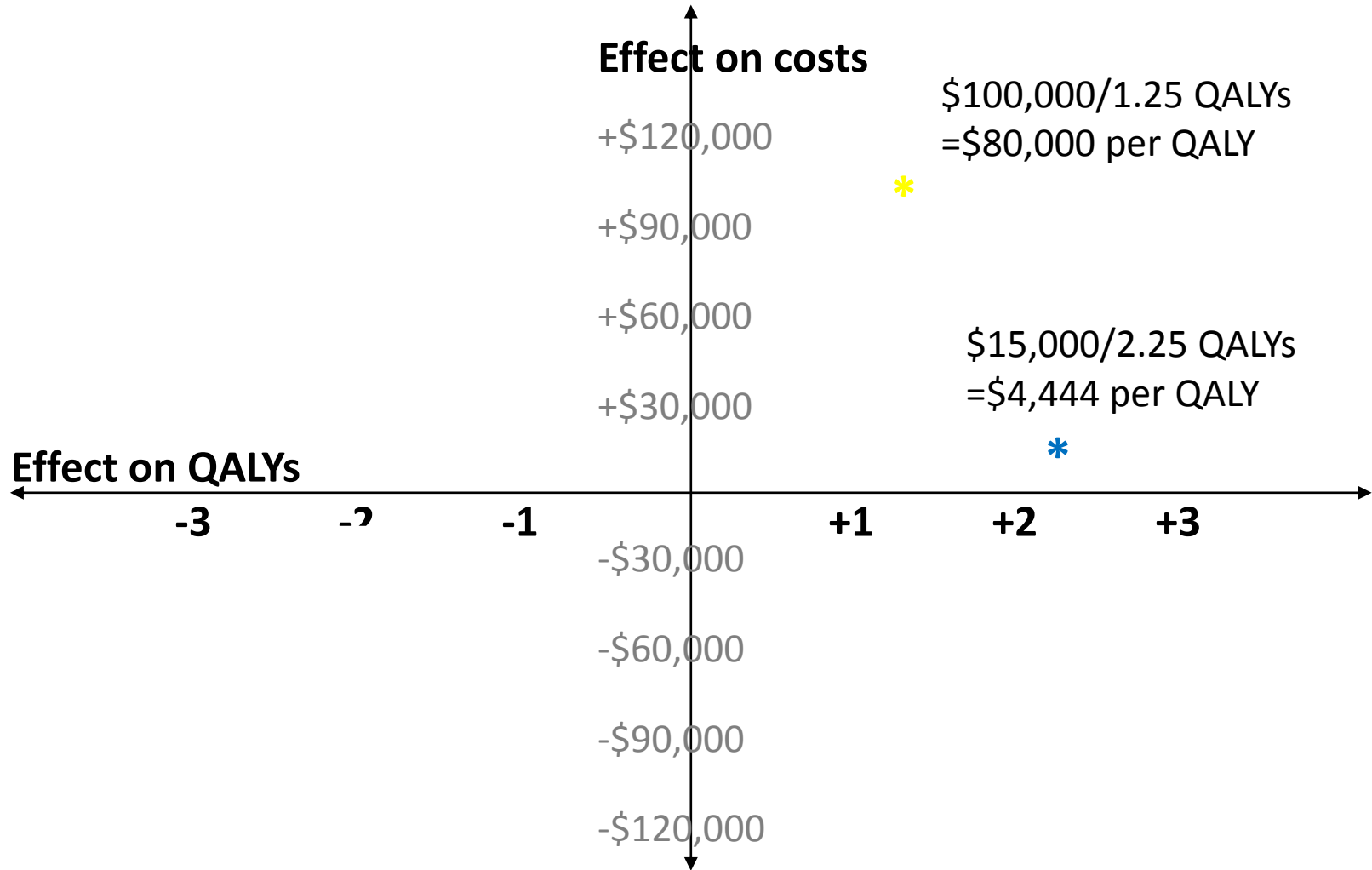




# Idea of the QALY



# Idea of the QALY



# Idea of the QALY

## **Important caveats:**

In principle, this is not a single payer issue; guidelines for 'ideal' economic evaluation are very similar in US and UK. We are interested in the most cost-effective care whoever pays. Lack of traction in US is as much political as anything.

In practice, this is highly complex and contested territory. Lots of considerations, including equity (e.g. rare diseases) and discounting.



# QALYs and the 'QALY problem' in PC

1. Idea of the QALY
2. **'QALY problem' in Palliative Care**



# The 'QALY problem' in Palliative Care

Understanding your dependent variable

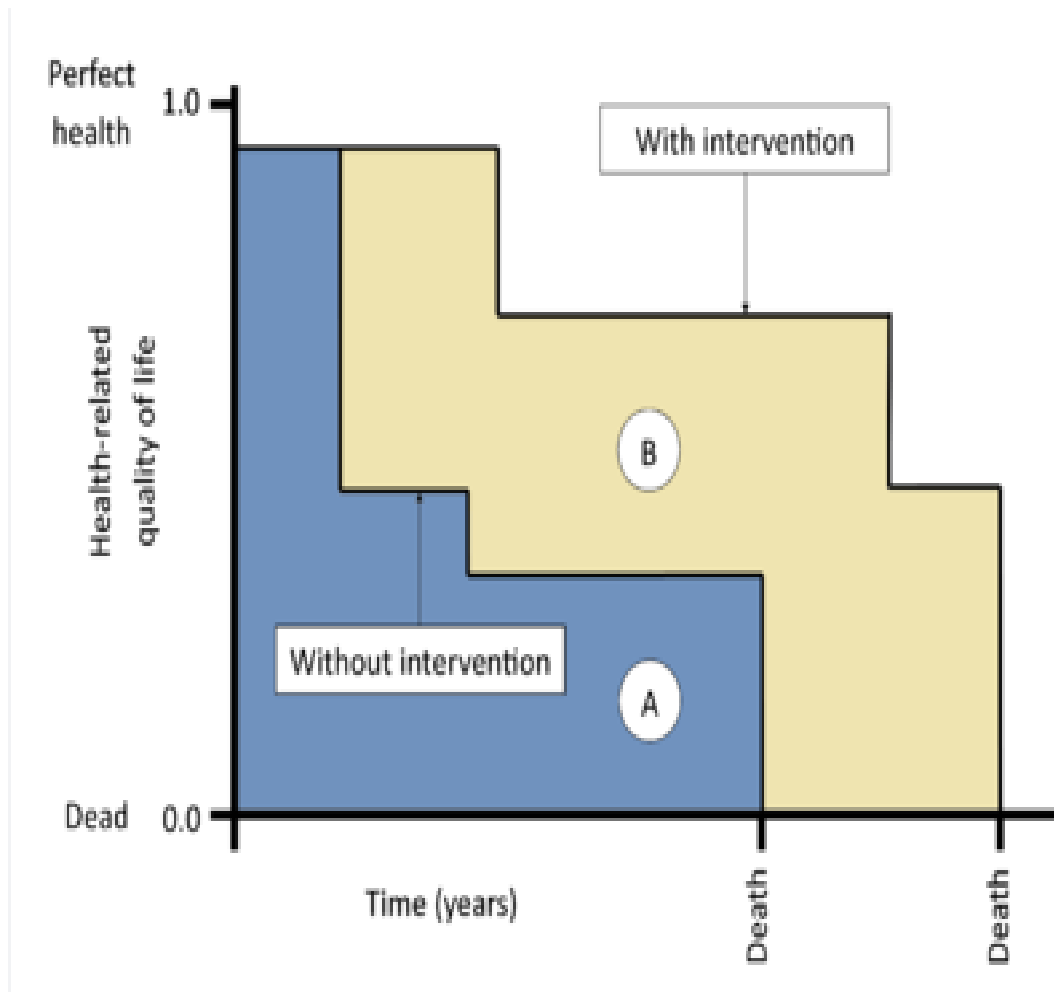
In addition to general limitations to QALY analysis, there are concerns specific to EOL context.

Typical EOL interventions:

- May not impact survival, have relatively short-term impact on QoL
  - QALYs assume additive time, but some evidence EOL time is valued differently
- May be multifaceted
  - QALYs assume trade-able preferences, but some evidence EOL preferences are lexicographical



# The 'QALY problem' in Palliative Care



# The 'QALY problem' in Palliative Care

Understanding your dependent variable

In addition to general limitations to QALY analysis, there are concerns specific to EOL context.

Typical EOL interventions:

- May not impact survival, have relatively short-term impact on QoL
  - QALYs assume additive time, but some evidence EOL time is valued differently
- May be multifaceted
  - QALYs assume trade-able preferences, but some evidence EOL preferences are lexicographical



# The 'QALY problem' in Palliative Care

Understanding your dependent variable

In addition to general limitations to QALY analysis, there are concerns specific to EOL context.

Typical EOL interventions:

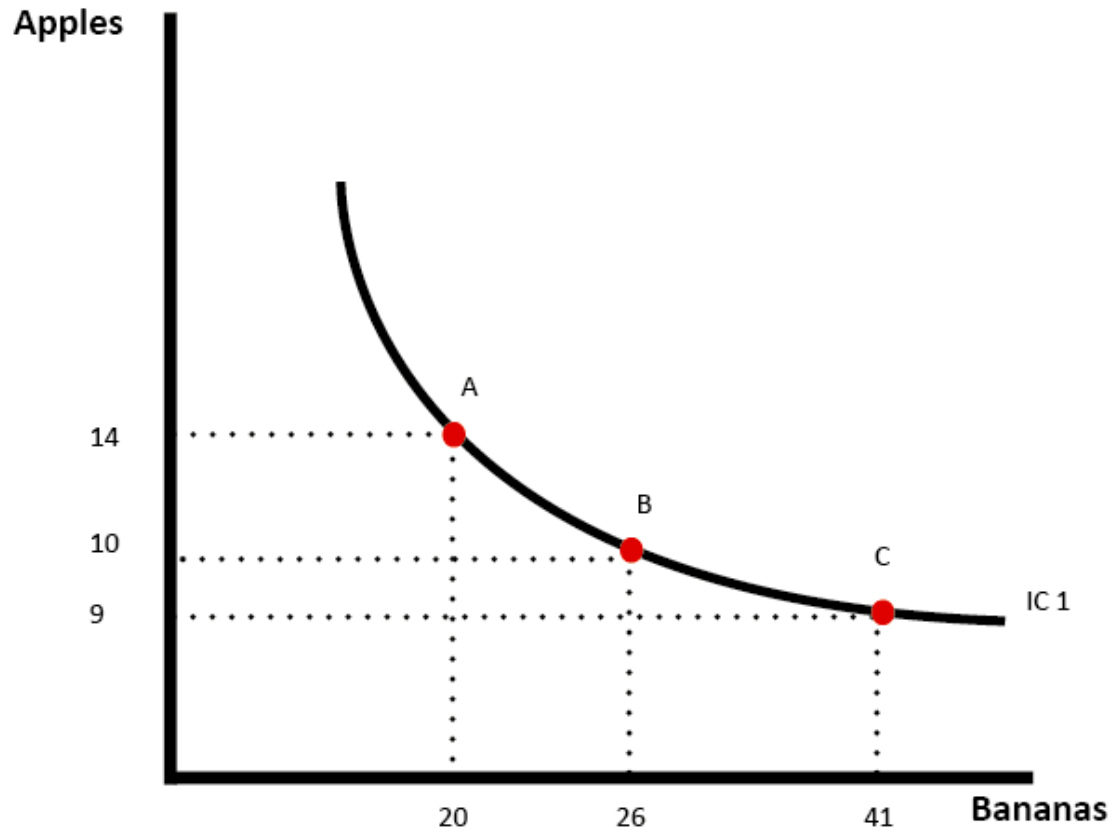
- May not impact survival, have relatively short-term impact on QoL
  - QALYs assume additive time, but some evidence EOL time is valued differently
- May be multifaceted
  - QALYs assume trade-able preferences, but some evidence EOL preferences are lexicographical





# Preferences

## Indifference curves



[www.economicshelp.org](http://www.economicshelp.org)



Trinity College Dublin

Coláiste na Tríonóide, Baile Átha Cliath  
The University of Dublin

# The 'QALY problem' in Palliative Care

Understanding your dependent variable

In addition to general limitations to QALY analysis, there are concerns specific to EOL context.

Typical EOL interventions:

- May not impact survival, have relatively short-term impact on QoL
  - QALYs assume additive time, but some evidence EOL time is valued differently
- May be multifaceted
  - QALYs assume trade-able preferences, but some evidence EOL preferences are lexicographical



# The 'QALY problem' in Palliative Care

Understanding your dependent variable

- There is a small, lively literature on this for those who are interested.
- A good starting point, with a hard-nosed economist's defence of the QALY and lots of references to other viewpoints, is:

ROUND, J. 2012. Is a QALY still a QALY at the end of life? J Health Econ, 31, 521-7.



# The 'QALY problem' in Palliative Care

Understanding your dependent variable

- My own view is that:
  - Some move towards cost-consequence analysis is essential (especially for interventions with survival effects)
  - QALY debate in PC is premature when so little cost-consequence work has been done
    - So, if conducting economic studies please consider cost-consequence analyses
    - But don't get too caught up on the QALY itself; it is an idea whose time is yet to come in palliative care or in American healthcare

