



# COLLABORATIVE PRIMARY CARE FOR OLDER ADULTS: THE CASPER STUDY

THE UNIVERSITY *of* York



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# Is it cost effective to prevent depression?

An interesting trial in a high risk population

A primer on health economics and cost-effectiveness

Some robust (trial based) cost effectiveness data



# The nature of the problem

- Sub threshold depression in older populations
  - ▣ Associated with significant decrements in QoL & function
  - ▣ Risk factor for case-level depression
  - ▣ Antidepressants don't work
  - ▣ 'Distressed high utilisers'
  - ▣ Primary Care Physicians screen, but don't know what to do...
  
- Pim has already told us that this is an attractive strategy
- 'High risk' approach to population mental health, with the potential to be good VFM



# CASPER

- Care for
- Screen
- Positive
- Elders



# Who took part?

- 705 participants
- Mean age 77 (range 65 – 99 yrs)
- DSM-IV Subthreshold depression
- Very few exclusions
  - ▣ Recently bereaved
  - ▣ Alcohol dependence
  - ▣ Terminal illness
  - ▣ Cognitive impairment
- Co-morbidity – 80% or more had 2+ long term conditions

# Collaborative care & behavioural activation for depression

- Case management
  - ▣ Brief psychological intervention – Behavioural Activation (BA)
  - ▣ Manualised and over the phone
  - ▣ Case managers trained and supervised
- Primary Care liaison
- Scheduled follow up
- Session by session symptom profiles

# Outcomes @ 4 and 12 months

PHQ9 – continuous measure

Case level depression in the follow up period

SF12

GAD7

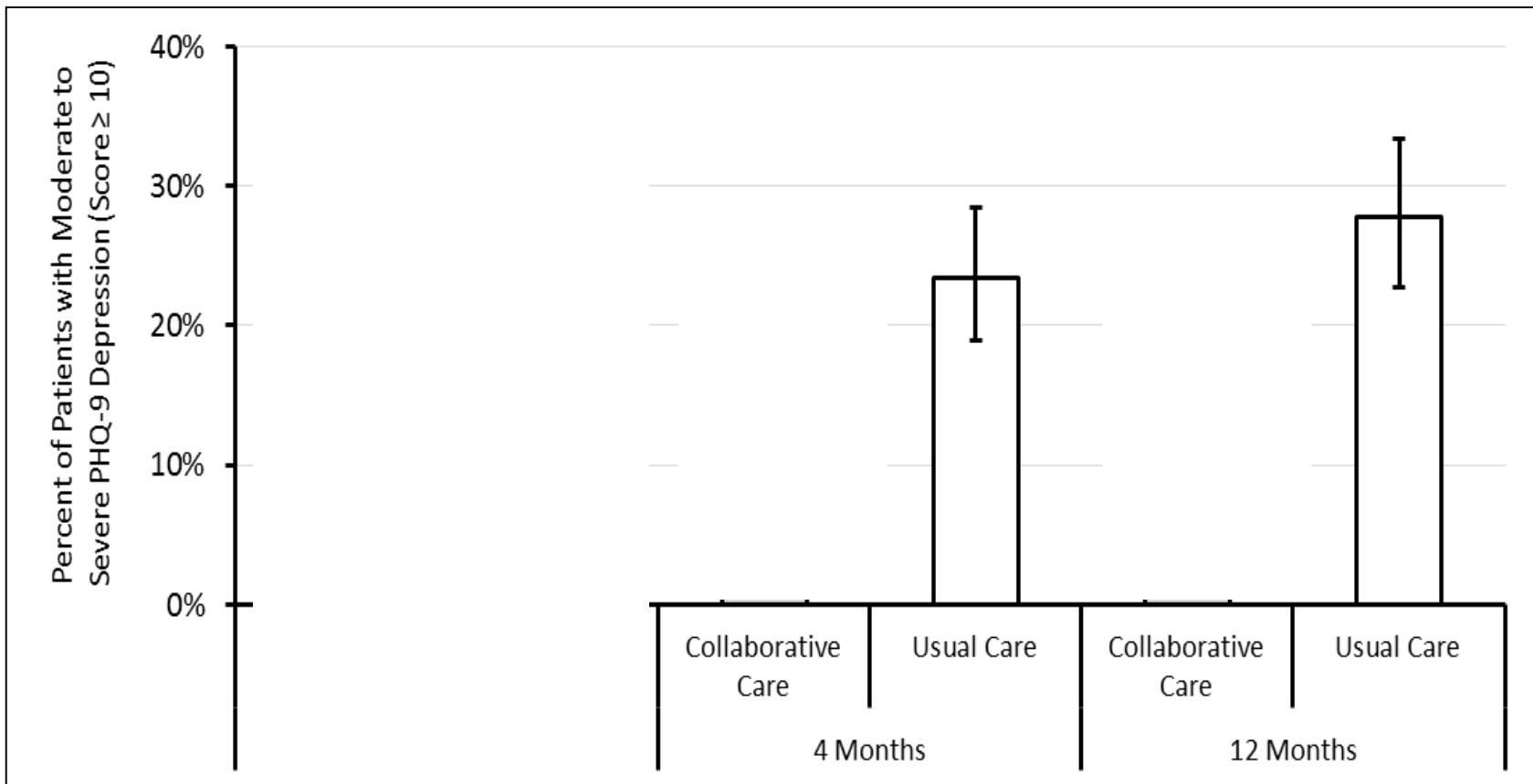
PHQ15

RISC2

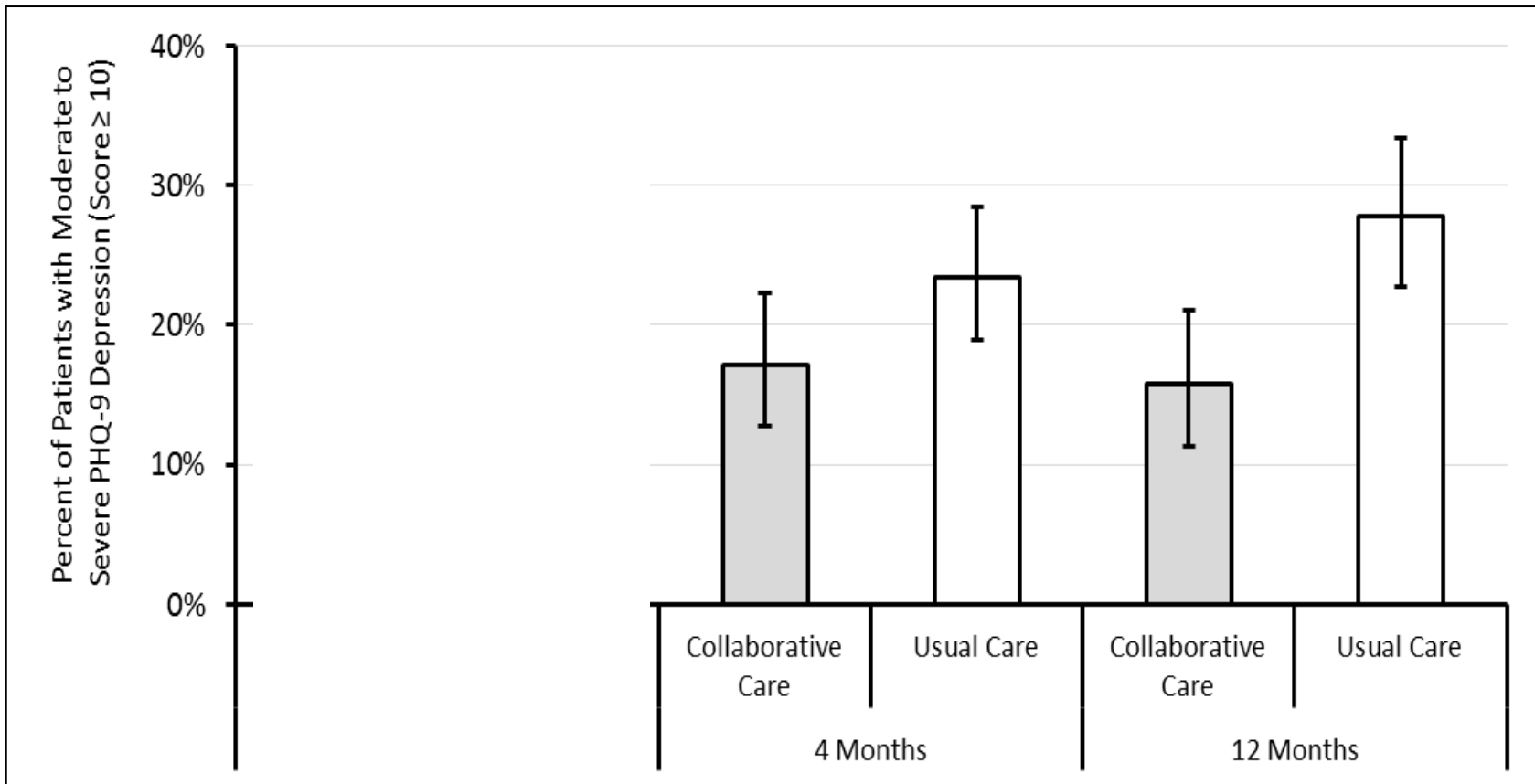


Does collaborative care prevent the onset of depression?

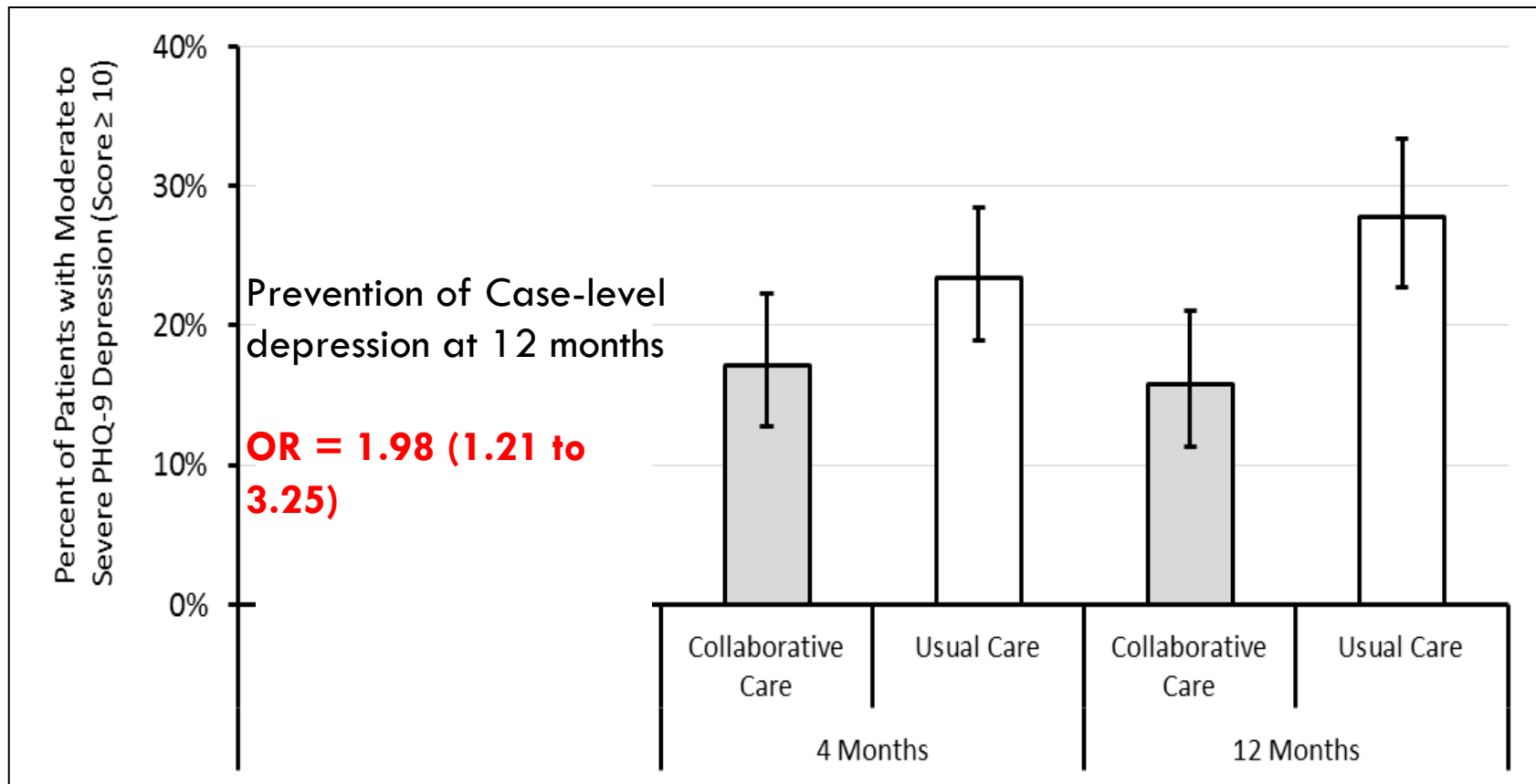
# Did collaborative care prevent case level depression?



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# Did collaborative care prevent case level depression?



Value for money?.....

# Some basic axioms of health economics



- Resources are finite; decisions and priorities need to be set
- Ensure the ‘greatest good for the greatest number of people’
- ‘Bang for your buck’
- Economic study only as good as the clinical data
- Trial-based economic evaluations – top level evidence, but few and far between

# CASPER trial-based cost effectiveness analysis

## □ Costs

- Primary care and hospital costs for participants over 12 months (from patient records)

- Visits, drugs, admissions
- Apply unit costs

- Costs of employing, training case managers and delivering the intervention

## □ Benefits

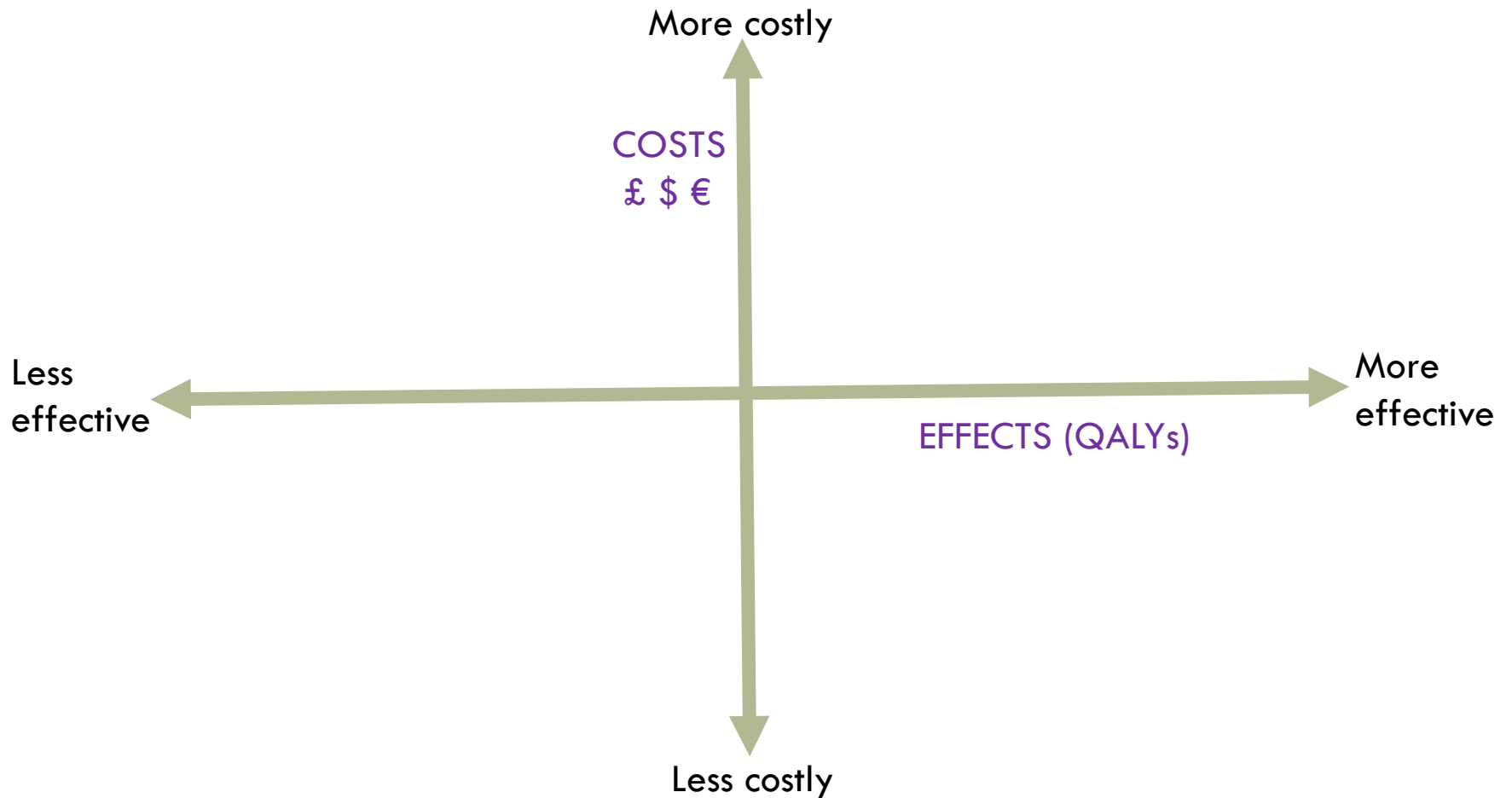
- Quality Adjusted Life Years (QALYs)
- Derived from the EuroQol over 12 months

## □ A number of scenarios

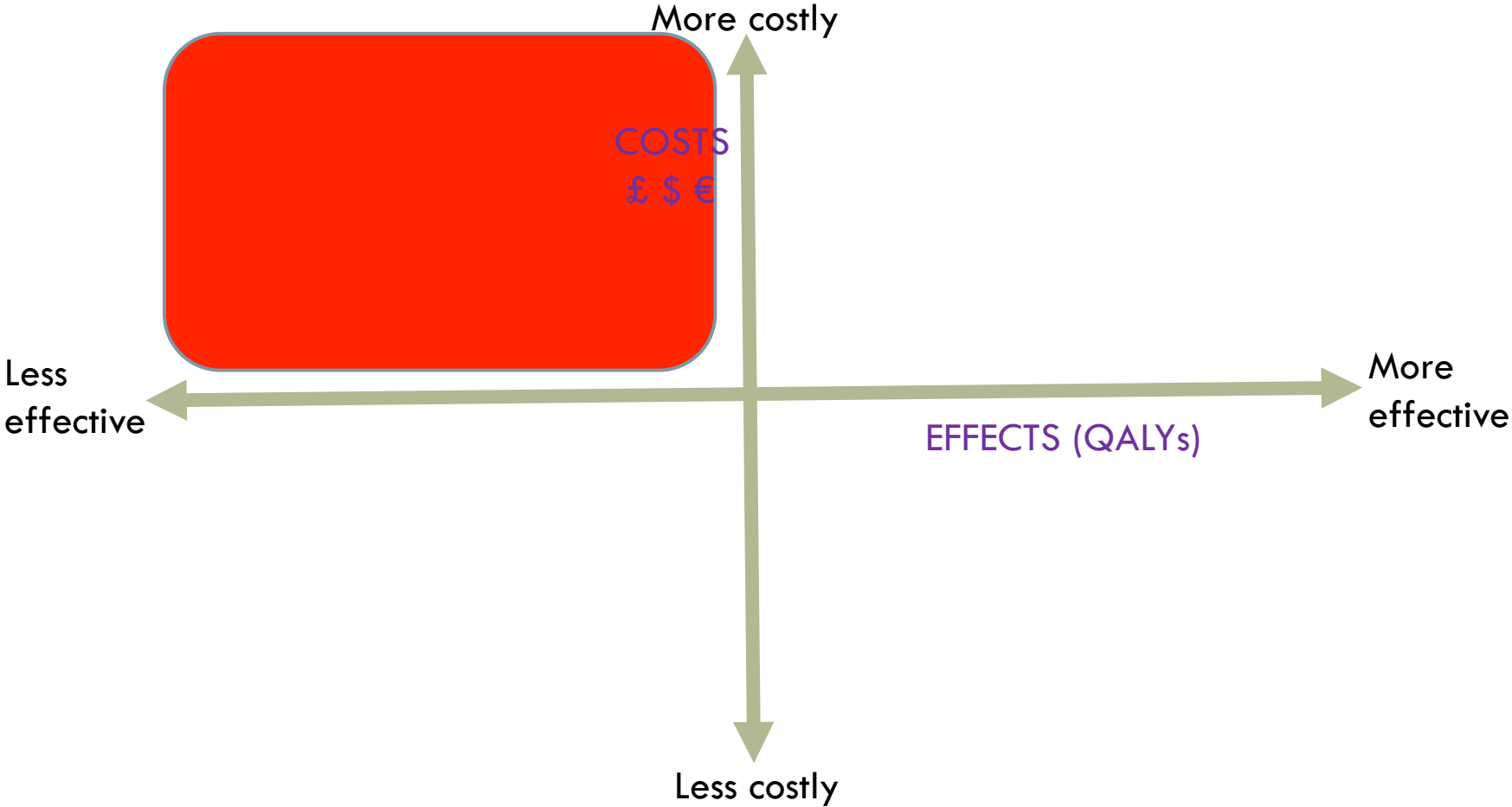
$$ICER = \frac{\Delta C}{\Delta E} = \frac{\bar{C}_I - \bar{C}_C}{\bar{E}_I - \bar{E}_C}$$



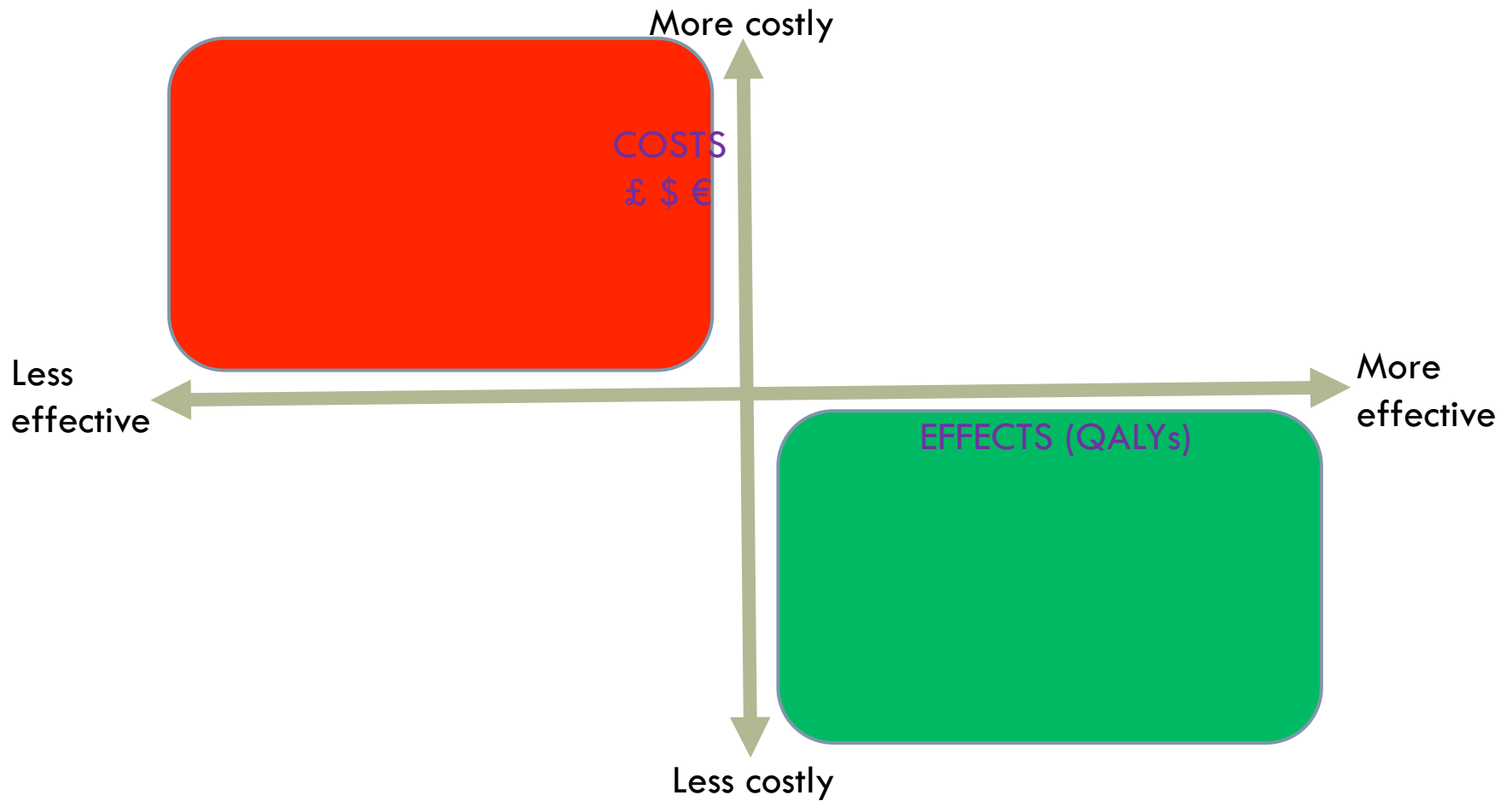
# The cost effectiveness plane



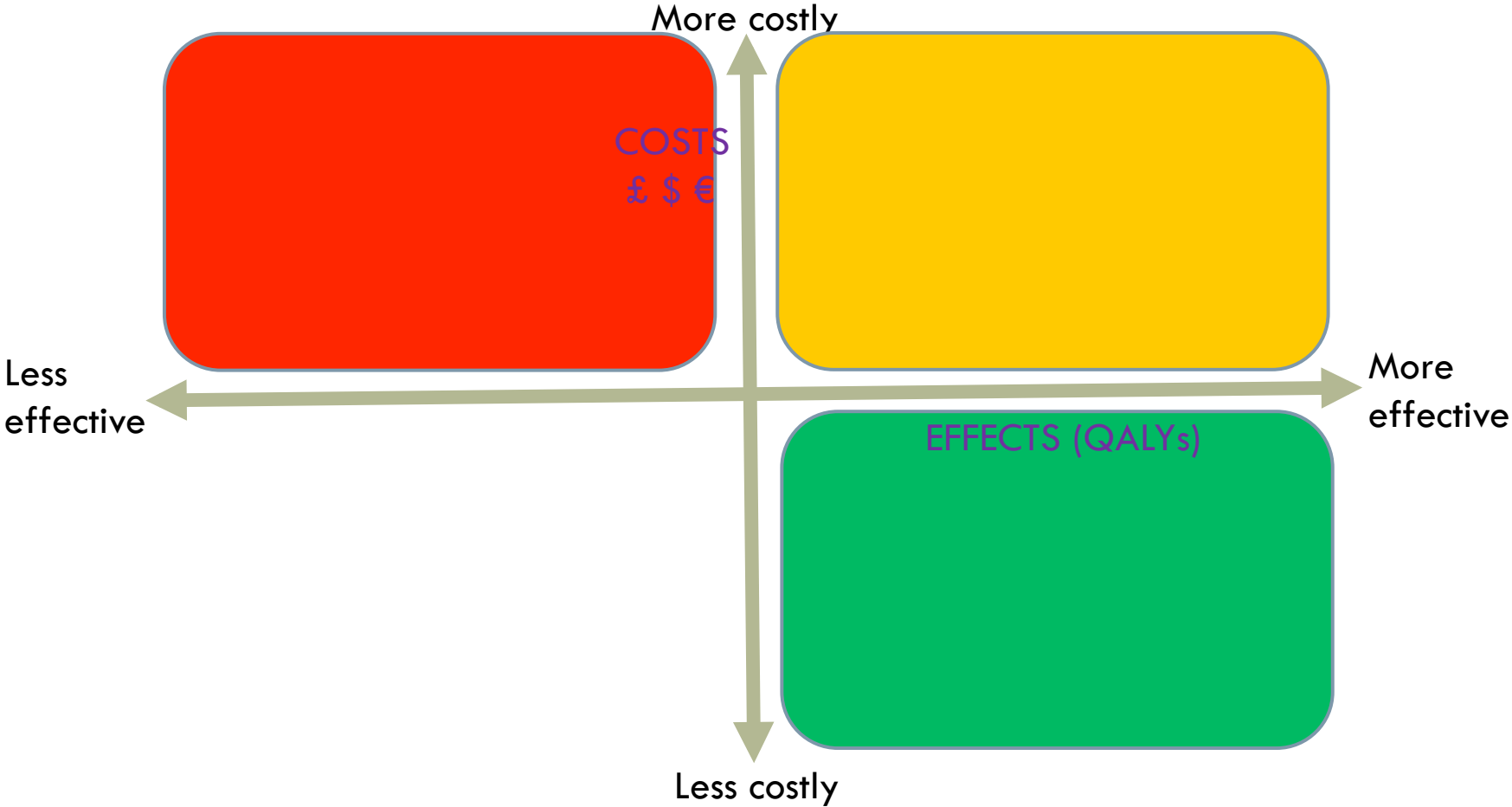
# The cost effectiveness plane



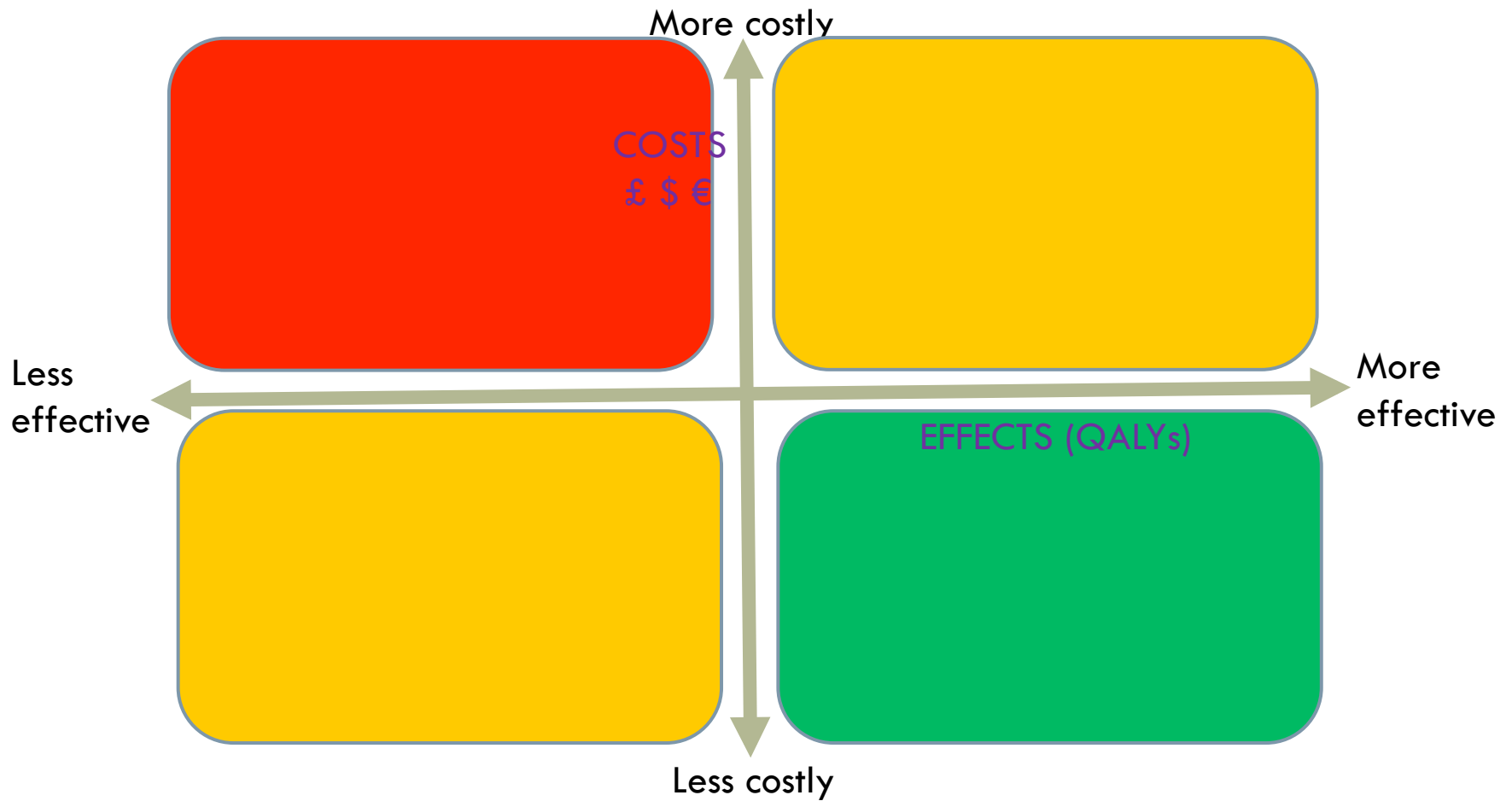
# The cost effectiveness plane



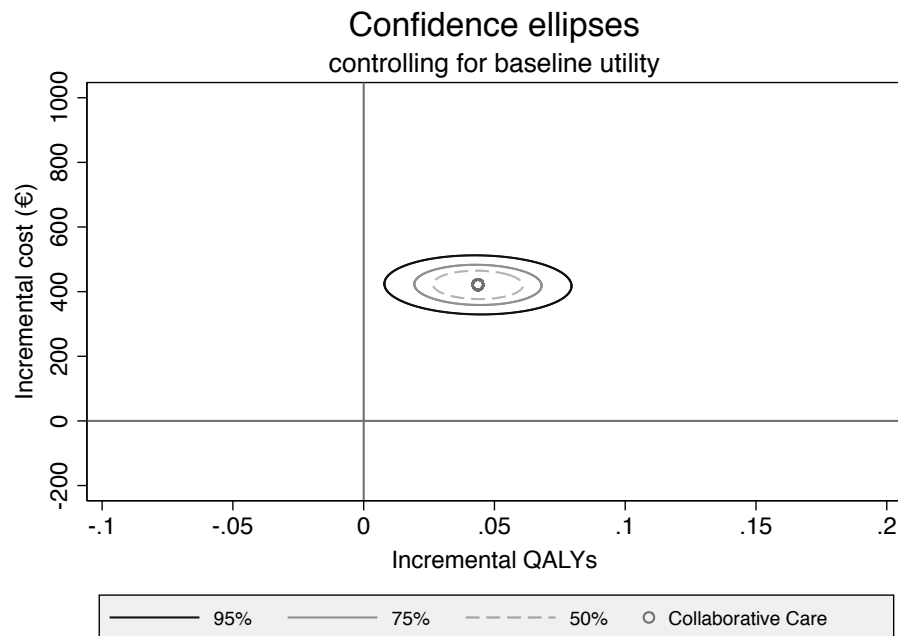
# The cost effectiveness plane



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# Was it cost effective?



- ITT costs of CC/BA = £494
- As delivered costs = £292
- Some evidence of cost offset - £55
- Worst case cost/QALY £9,633
- CC/BA as delivered cost/QALY £3328

# Would a decision maker be willing to pay for a preventative strategy?

- Willingness to pay (WTP)
- Decision making bodies £20,000 to £30,000 per QALY
- 'Revealed preferences'
- Compares very favourably with other things that society or healthcare systems pay for
- Smoking cessation, treatments for acute depression, cancer treatments



# Summary of findings



- Prevented the onset of case level depression
- Cost effective
- Largest UK trial of collaborative care/BA to date
- Largest ever trial of CC/BA for subthreshold depression

# Acknowledgements

Too many to mention

Team-CASPER

CASPER participants



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