

# TACKLING SOCIO-ECONOMIC INEQUALITIES IN HEALTH: WHAT CAN ECONOMICS BRING TO THE TABLE?

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# Overview

- Why economics?
- Economic arguments
- Economic tools

# WHY ECONOMICS?

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# Why economics?

- Health inequalities are a fundamental matter of social justice
- What does this have to do with economics?
  - Economic arguments are persuasive and carry sway with decision makers
  - Economics provides tools to help understand and quantify inequalities
  - Economics can be used to identify policy options that tackle inequalities efficiently

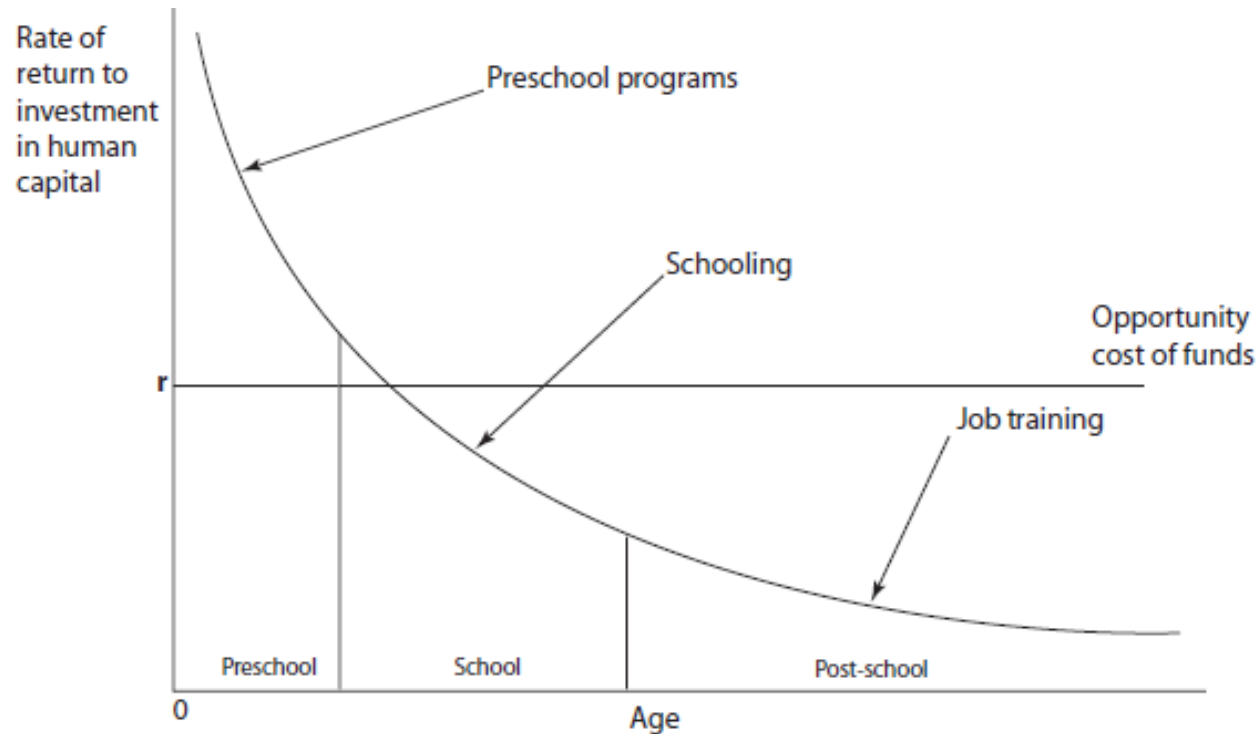
# ECONOMIC ARGUMENTS

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# Economic Arguments

- Ill health has several negative economic impacts
  - In childhood linked to worse life outcomes
  - Can lead to increased health care costs
  - Years of life and quality of life lost
  - May result in lower productivity

# Heckman Curve



Rates of return to human capital investment initially setting investment to be equal across all ages

Source: Heckman & Carneiro (2003) Human Capital Policy

# ECONOMIC TOOLS 1

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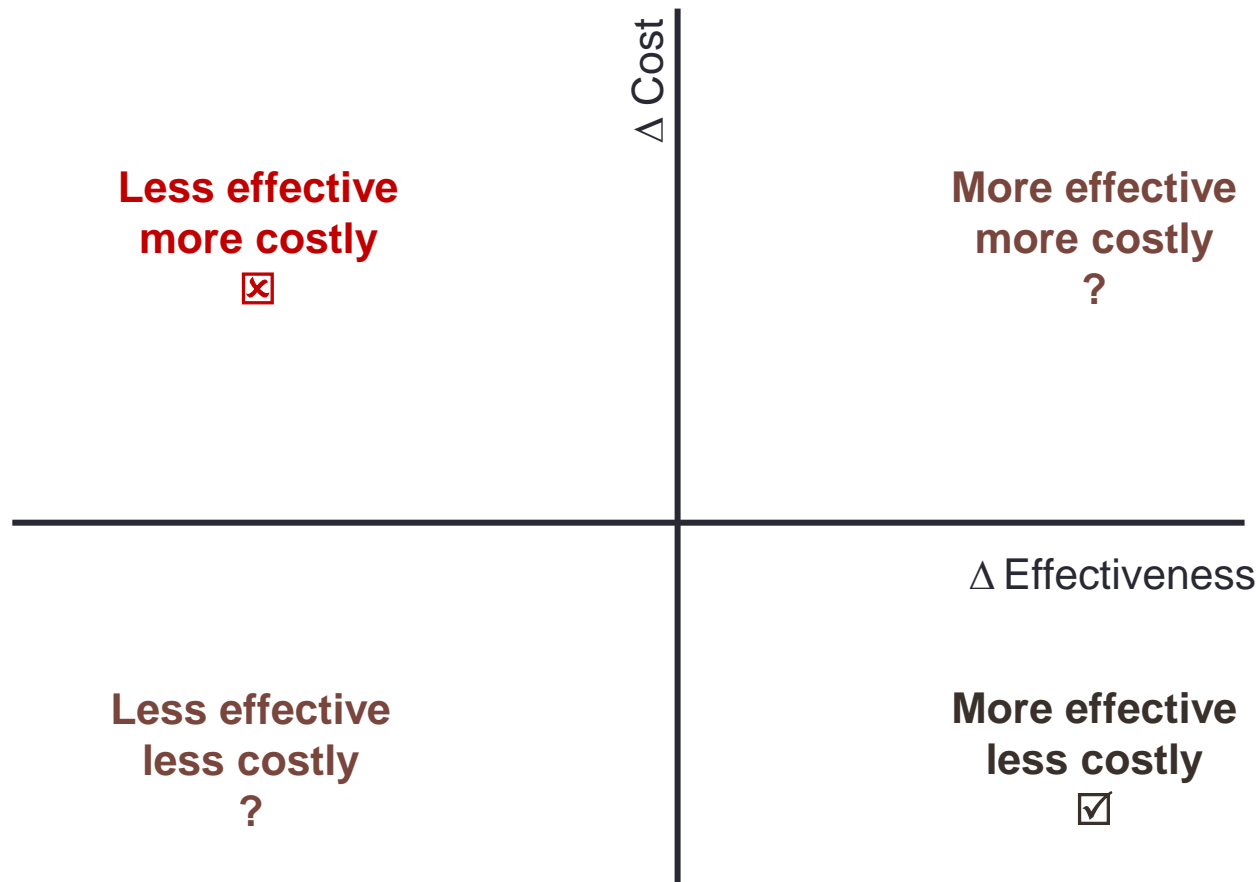
Cost-Effectiveness Analysis



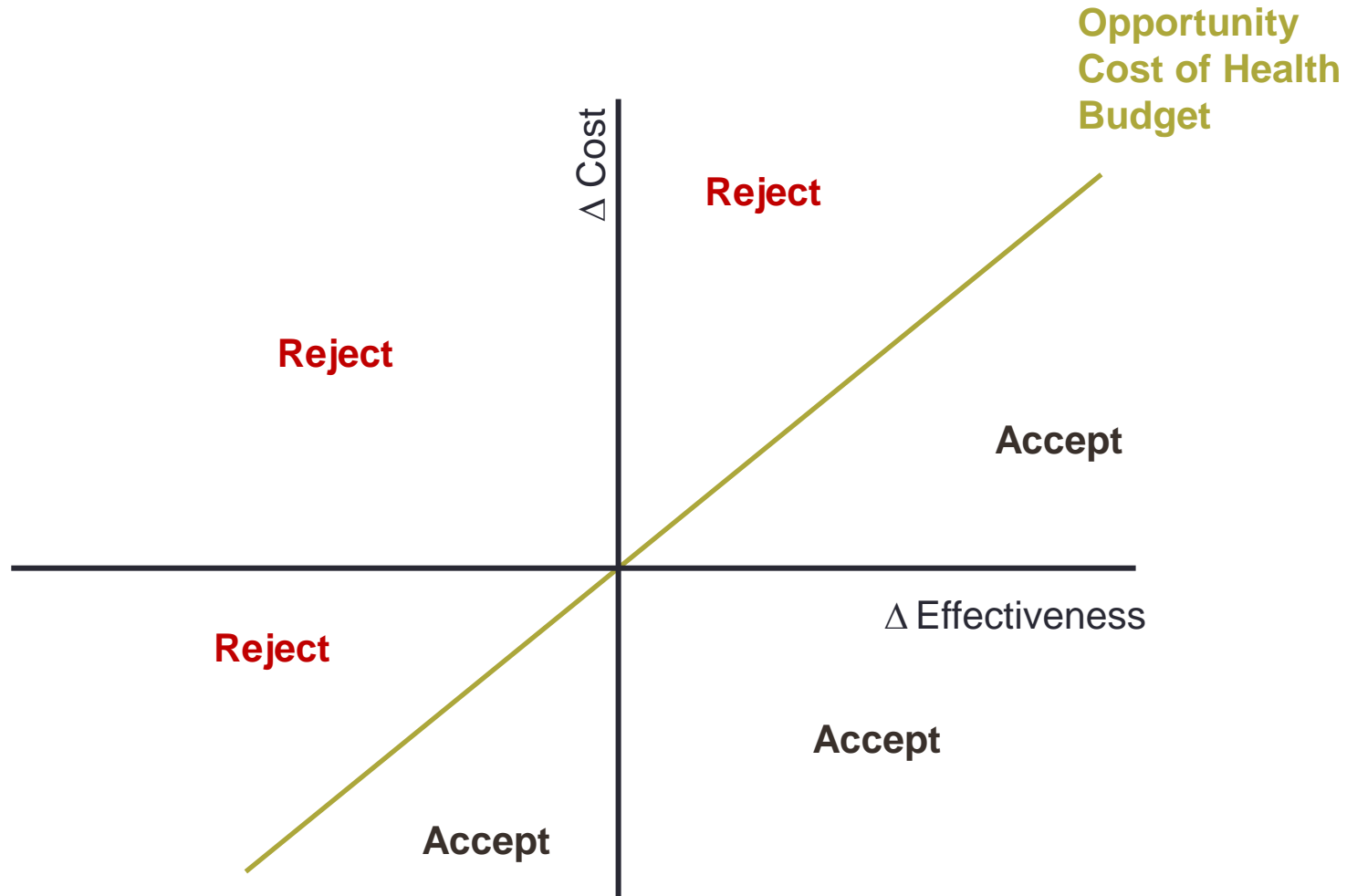
# The Economic Problem

- Resources are scarce
- Decision makers need to prioritise
- Cost-effectiveness analysis is about doing as much good as possible with fixed budget
- In this case maximise overall health benefits

# Cost-Effectiveness Analysis



# Cost-Effectiveness Analysis



# Cost-Effectiveness Analysis

- Cost of funding one health policy is the health we lose by not funding an alternative health policy
- CEA only focusses on maximising total health – has nothing to say on the distribution of health

# ECONOMIC TOOLS 2

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Inequality Analysis

# Economics and Inequality

- Tools developed in economics and epidemiology to measure inequality
- Some were developed to study income so should be interpreted with care
  - Income is unbounded health is bounded
  - Equality of income theoretically possible

# Equality versus Equity

- Allows us to isolate 'fair' inequalities from 'unfair' inequalities
  - Adjust health distributions on multiple dimensions for fairness
  - Shifting focus from equality to equity

# Distinguishing Inequality Concepts

- Absolute

*inequality between a life of 100 years and 110 years equivalent to inequality between a life of 50 years and 60 years*

- Relative

*inequality between a life of 100 years and 110 years equivalent to inequality between a life of 50 years and 55 years*



# ECONOMIC TOOLS 3

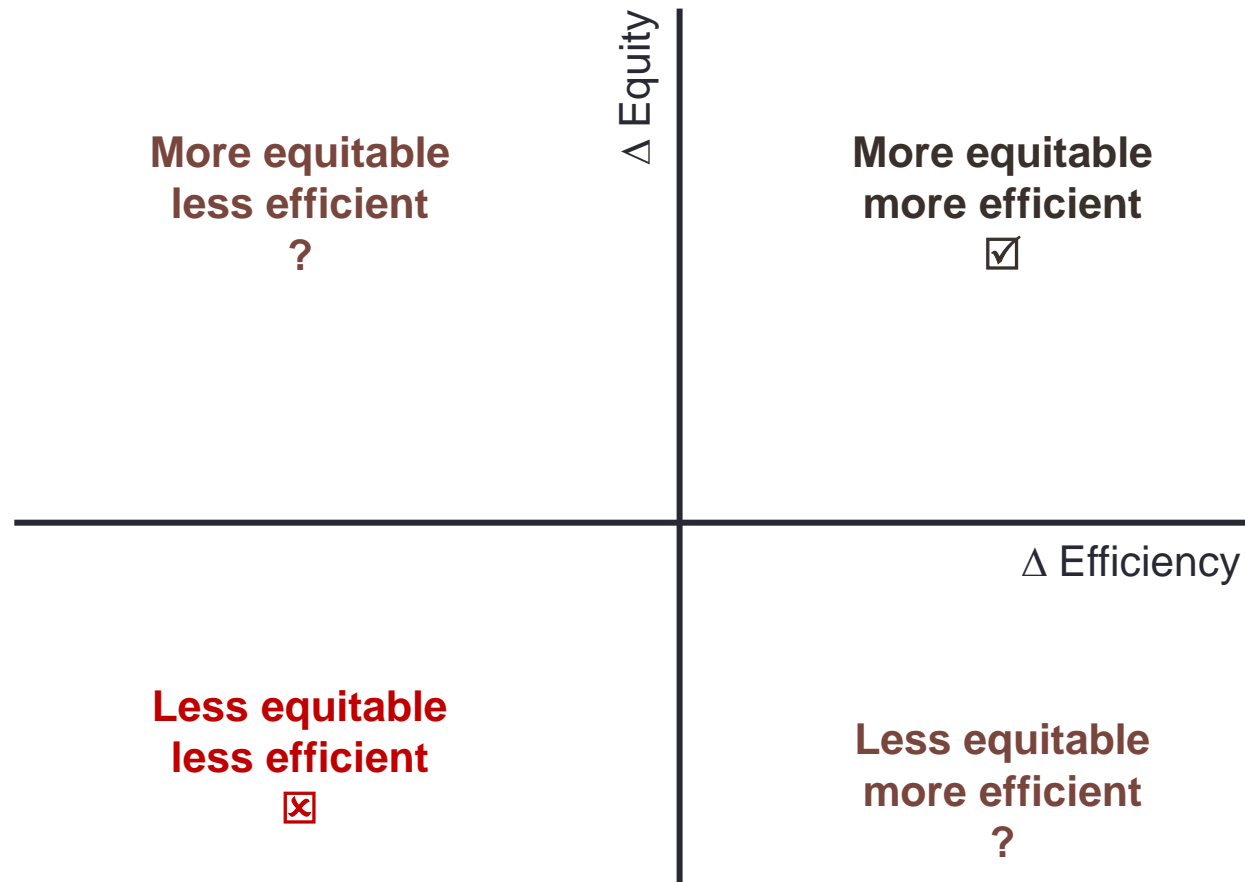
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Combining Equity and Efficiency

# Equity versus Efficiency

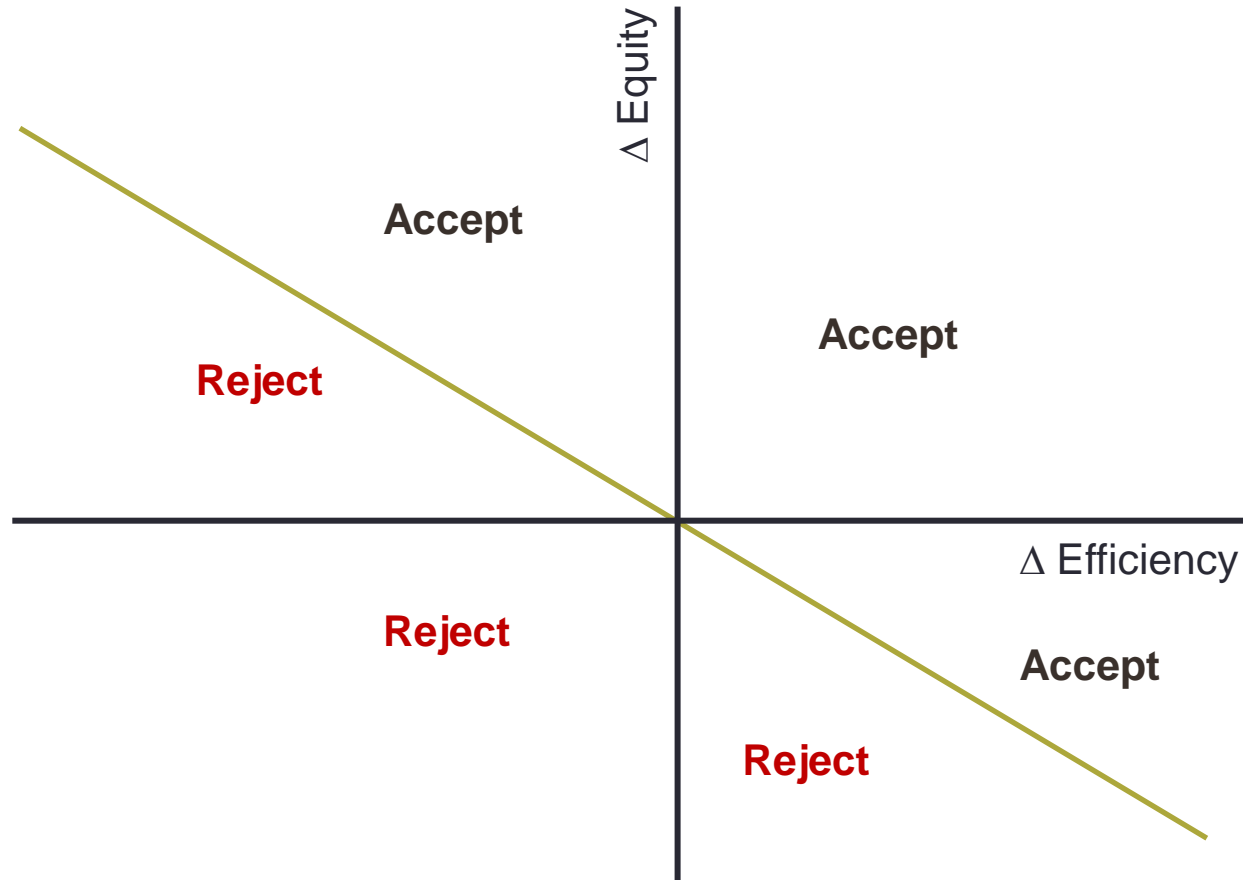
- Social welfare functions combine concern for maximising health and minimising health inequality
- Bring together cost-effectiveness analysis and inequality analysis
- When these objectives conflict there is a need to trade off

# Social Welfare Analysis



# Social Welfare Analysis

Equity  
efficiency  
trade off



# ECONOMIC TOOLS 4

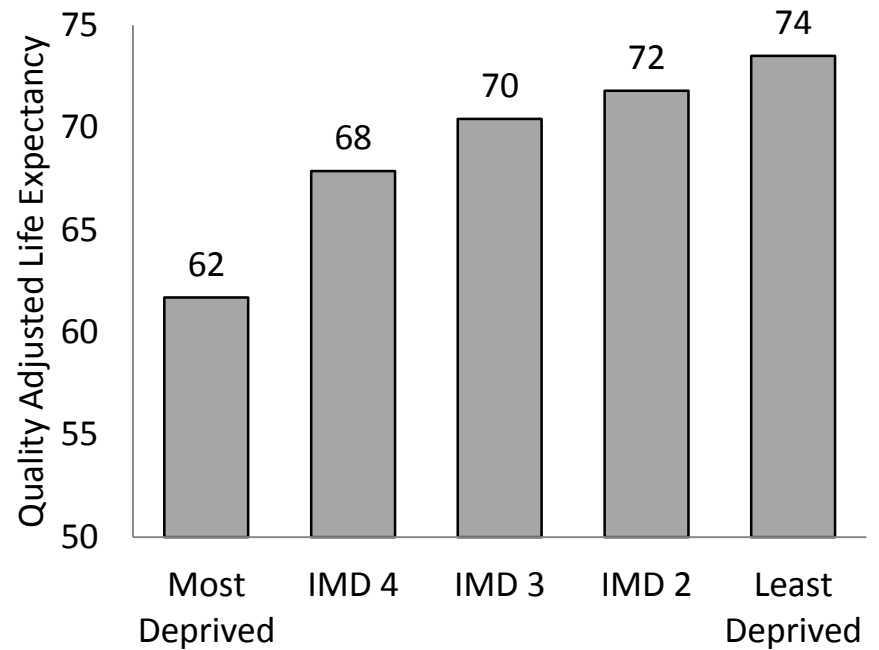
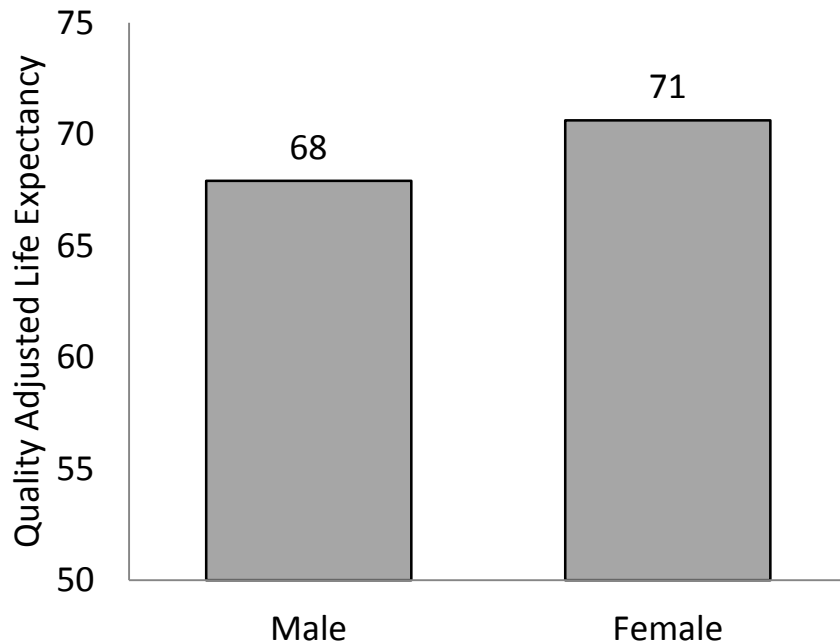
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Distributional Cost-Effectiveness Analysis

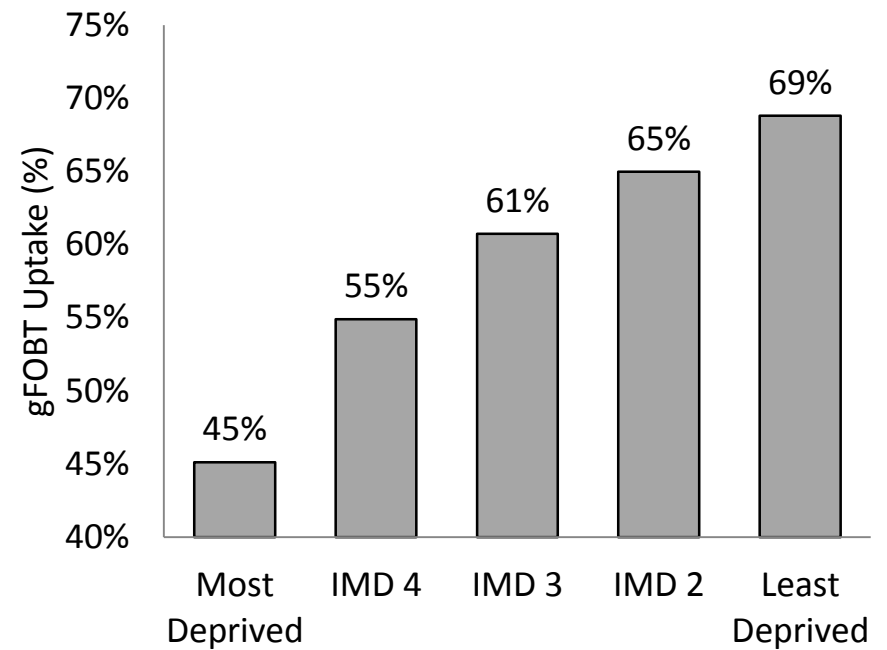
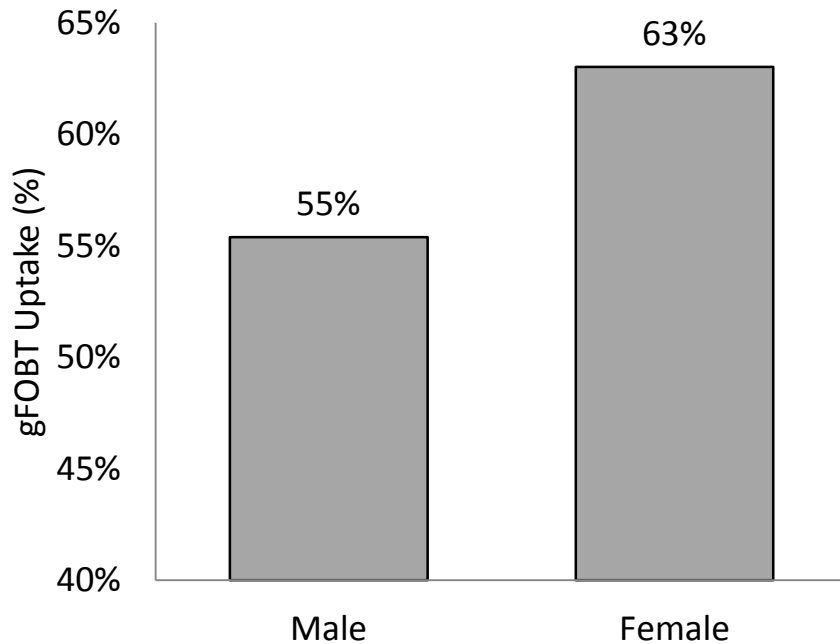
# NHS Bowel Cancer Screening Programme

- Bowel cancer is the second most common cause of cancer death in the UK – more than 16,000 in 2010
- Free national screening programme rolled out in 2006 to all 60-74 year olds in England
- Those who attend screening have a 25% reduction in their risk of dying from bowel cancer
- Less than 60% of those eligible for screening participate

# Inequality in Health



# Inequality in Screening Uptake

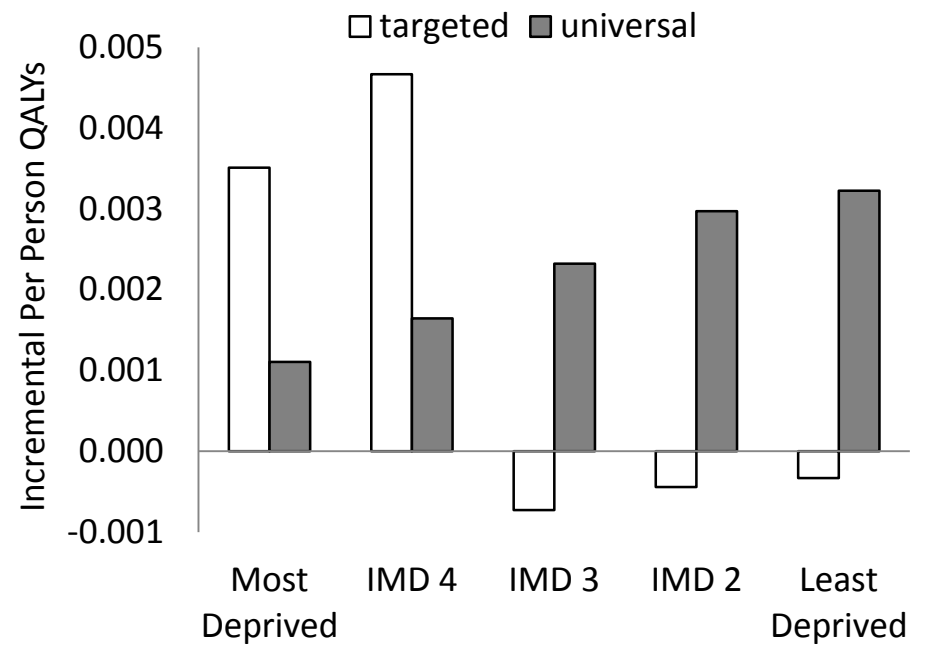
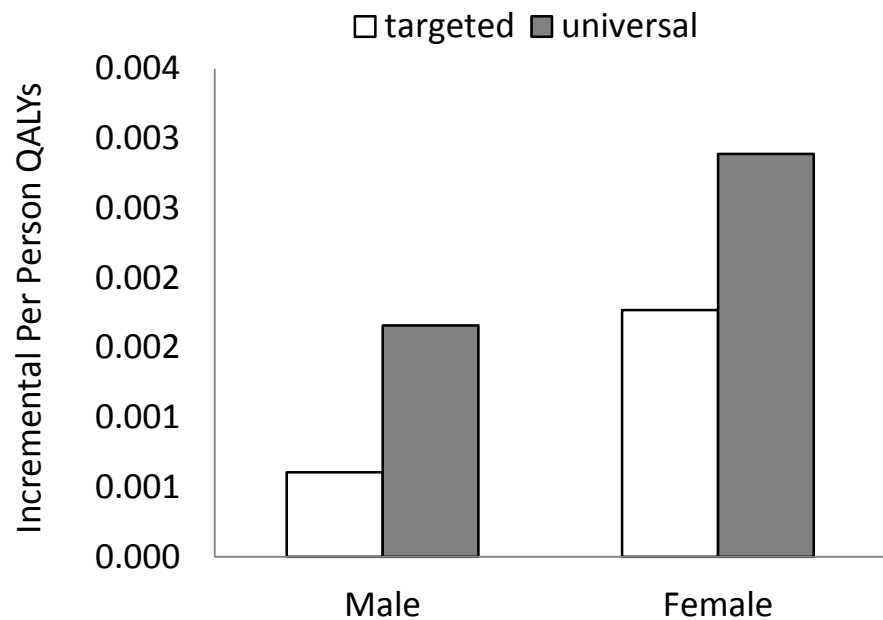




# Redesign Options

- Two redesign options considered both having same total cost
- Option A: additional reminder sent by doctor targeted at the most deprived areas – increase in uptake 12%
- Option B: a standard reminder sent to everybody – increase in uptake 6%

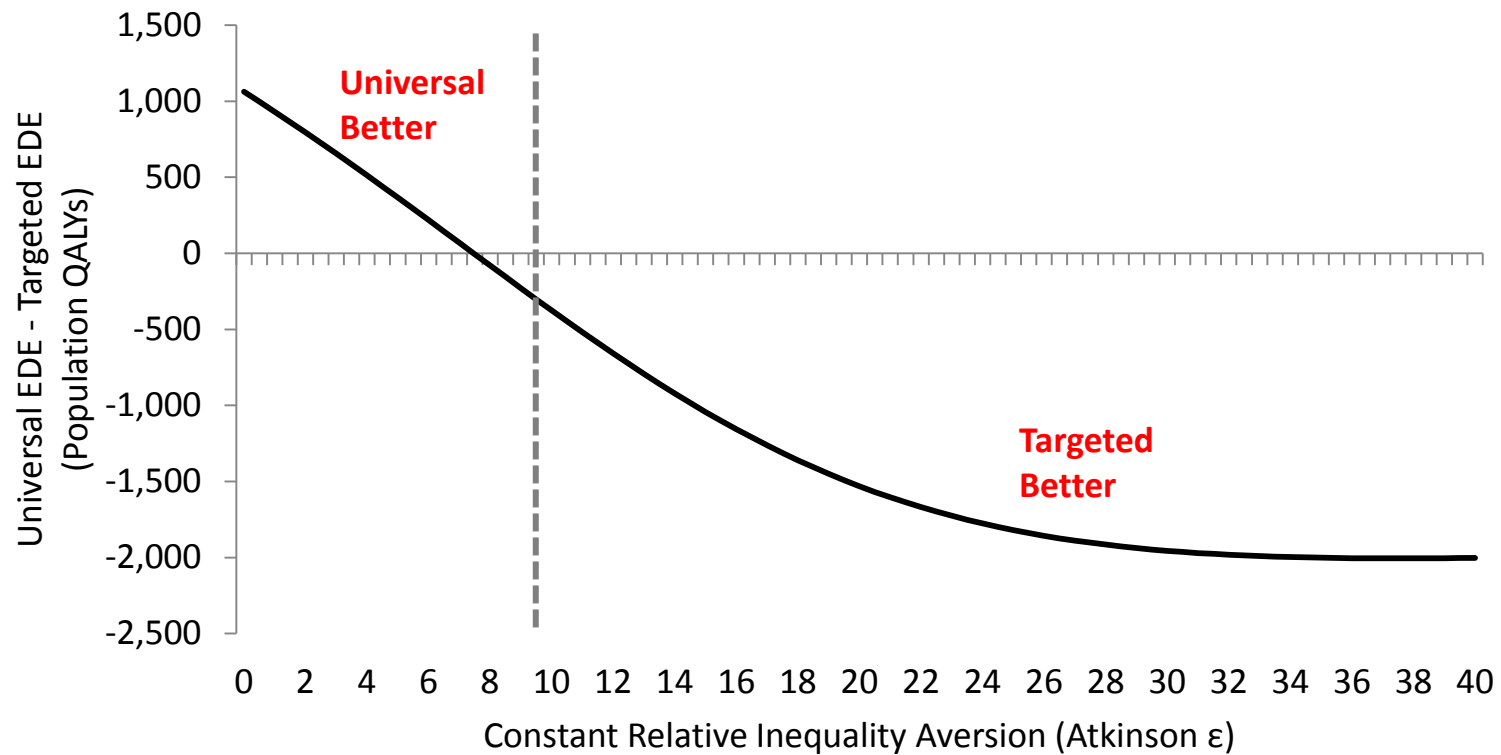
# Impact of Redesign on Health



# Distributional Cost Effectiveness Analysis

- Underpinning value judgements to move from CEA to DCEA
  - which inequalities are fair and which unfair – in this example all assumed unfair
  - form of social welfare function – in this example we use an Atkinson function
  - level of inequality aversion

# DCEA Results



# CONCLUSION

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# Conclusion

- Tackling health inequalities is a matter of social justice
- Economics can help provide tools to think about and quantify health inequality
- Economics can help identify efficient policies to address inequalities and make trade-offs if and when necessary
- Economic arguments can provide further support for reducing health inequality

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