

The State of the Art: Economics and mental health in children and adolescents

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THE LONDON SCHOOL
OF ECONOMICS AND
POLITICAL SCIENCE ■

PSSRU
Personal Social Services Research Unit

Where we're going

A. Some introductory remarks to define the territory

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A

Introduction

(Health) economics: the discipline ... can be applied to the topic of child mental health

Whole system(s) evaluation

Market analysis

**Supply and demand
for health care**

**What is health? What is
the value of health? What
influences health?**

**Studies of planning, budgeting
and monitoring mechanisms**

Micro-economics & evaluation

Micro-economics & evaluation

High demand – low supply

Evaluation modes – and where we going

- B. Cost of illness studies
- C. Costs in adulthood and cost savings in the future
- D. Cost-effectiveness studies
- E. Finale

■ **IMAGINE...**

For Europe - scant evidence

The cost of brain disorders

- 5.93 million c&a 0-17 years with ...
- ASD, CD, ADHD
- €21.3billion (PPP; 2010) for health care, non-medical care and informal care
- Only 3 disorders?
- 11 studies for epidemiology; 4 for costs

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B Cost of illness studies: ADHD

Cost of illness: the case of ADHD (US\$PPP, 2021)

2*US lit reviews :
\$4,600 - \$18,470

2*UK surveys:
\$5,300 - \$6,665

Belgium parent survey:
\$1,980

NL clinical
sample :\$4,900

Cost varies by study design, age, severity etc. and most importantly scope

Scope – costs in these studies cover different combinations of mental health care, social care, education, justice system, parental out-of-pocket expenses, lost productivity

Cost of health care: the case of ADHD (US\$PPP, 2021)

2*US lit reviews :
\$600 - \$3,410

2*UK surveys:
\$2,170 - \$460

Belgium parent survey:
\$1,130

NL clinical
sample :\$1,010

Cost varies by study design, age, severity etc. ... and scope?

Scope – what does each country/region/area provide within health and mental health care? What information was recorded?
[Health care as % of total? Education and CJS?]

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C

**Future costs
and cost
savings studies:
CD**

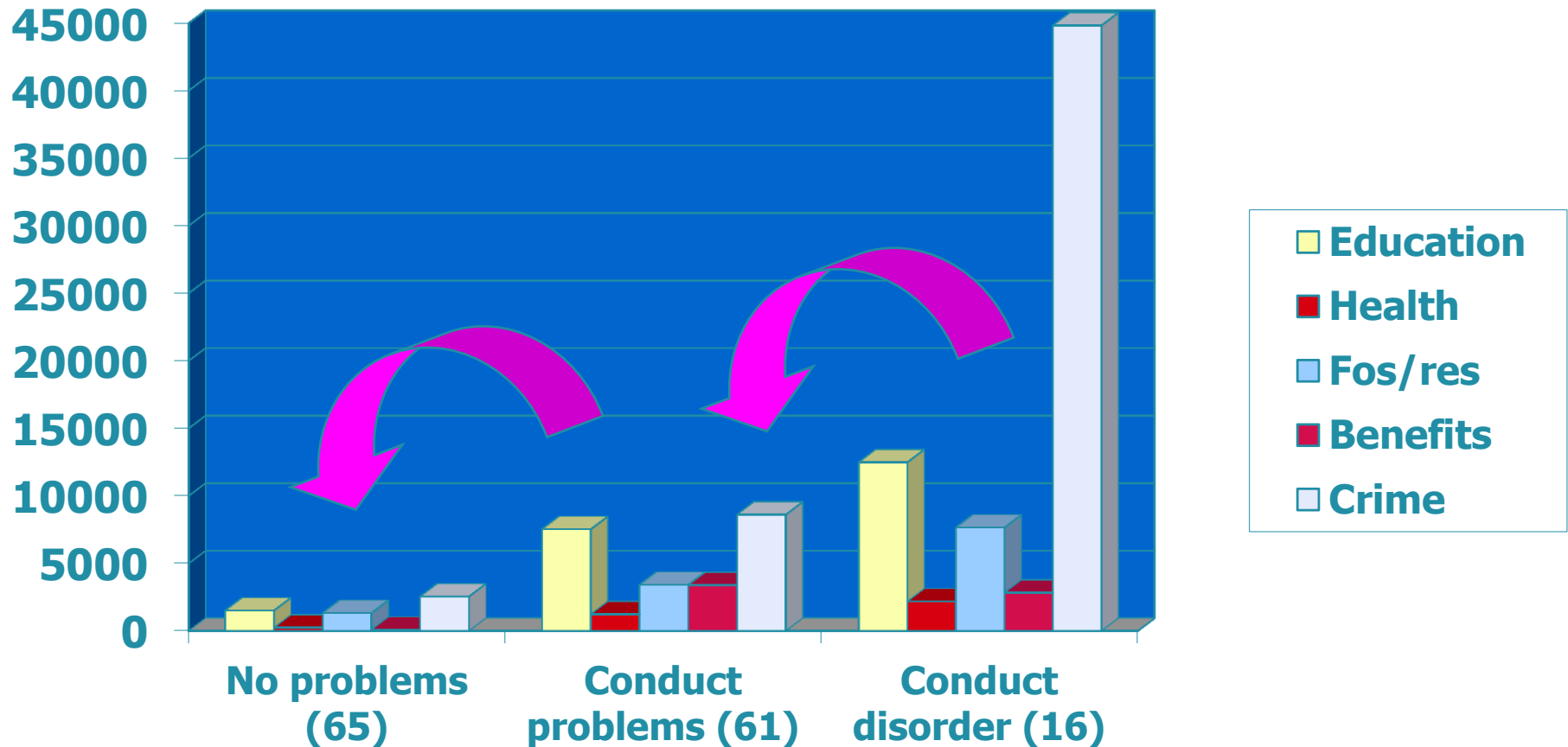
Outcomes in adulthood (UK)

Analysis of UK cohort surveys suggests:

- C&A CD: less likely to be economically active age 30 than no-CD peers, but if working, earned more. (Poorer outcomes at 35-56 also.)
- C&A ADHD: at age 30, poorer employment and if working were in less-skilled, lower-paid jobs than no-ADHD peers
- Externalising behaviour: at age 30, more symptoms of depression, anxiety, alcohol abuse and experienced adversity than no-EB peers.

Future costs: the case of CD in the UK

Average extra costs from 10 to 28yrs



Persistent CD: cost saving model

Advantages of decision models

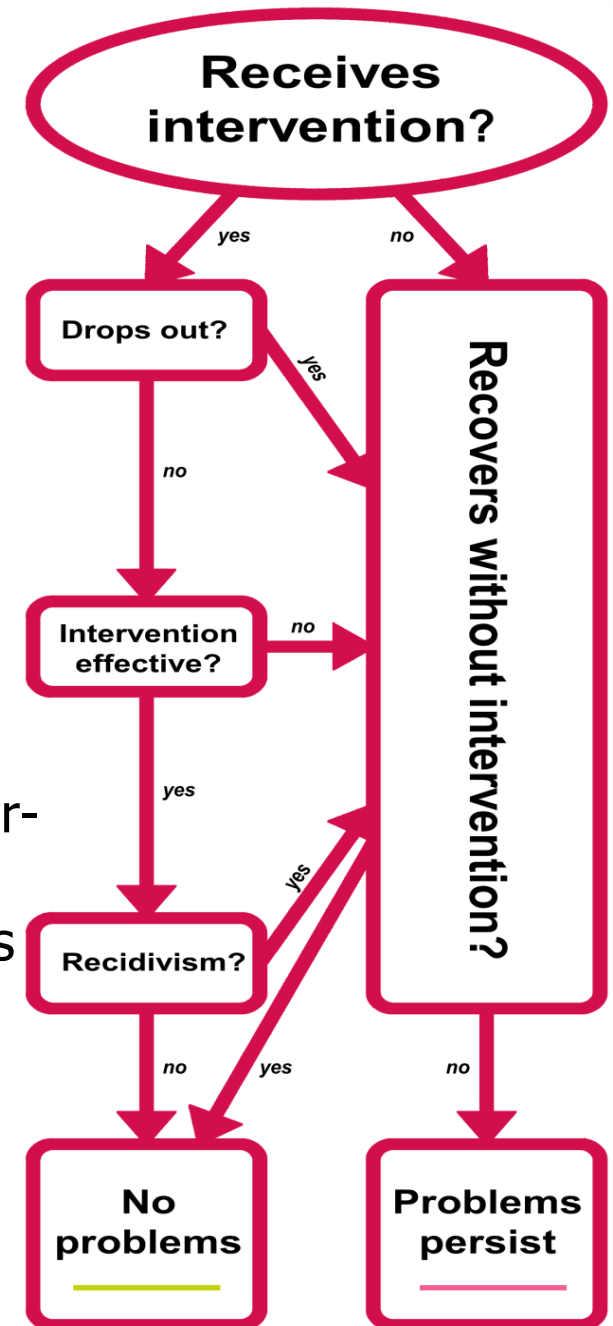
- Estimates impact of an intervention when insufficient evidence on costs and outcomes exists.

Disadvantage of decision models

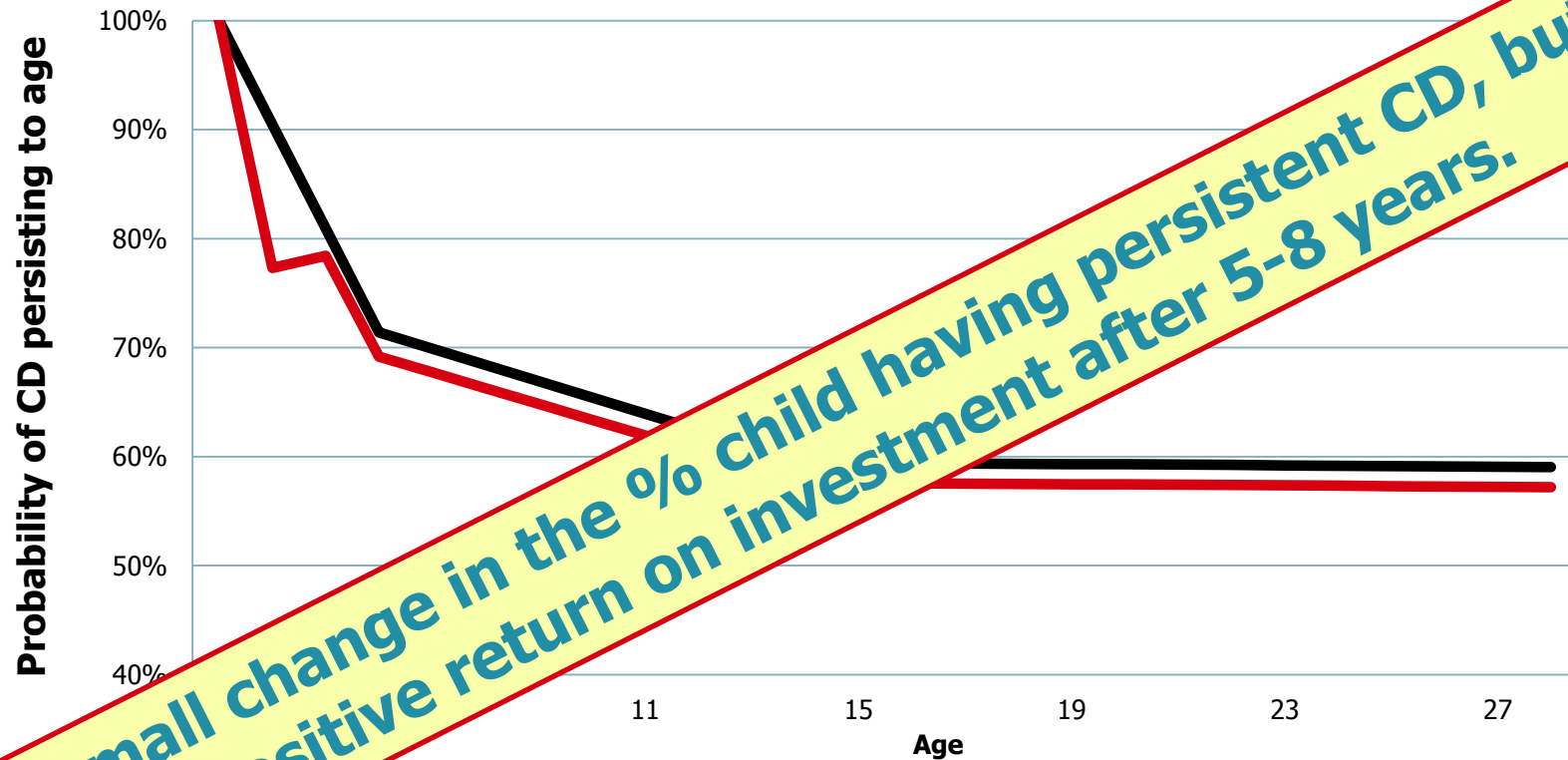
- Insufficient evidence to build the model!
- Many do not make clear the assumptions used

A number of uncertainties including links between:

- C&a disorder and longer-term outcomes
- Improvement in c&a disorder and improvement in longer-term outcomes
- Services/support used (costs) and longer-term outcomes
- Limited transferability between countries
- And of course, rarity of evidence on the costs of the problem we are trying to prevent



Probability of child with persistent CD



— No intervention — Parenting programmes

Parenting programmes for child age 5 with persistent CD (2008-09 prices)

Budget	Av £ p.a. per person with P~CD			
	Age 5-10	Age 11-16	Age 17-24	Age 25 years
NHS	£1,1113	£101	£1	£2,195
Social Care	£157		£63	£109
Education	£88	£7202	£0	£690
Voluntary Org		£23	£23	
				£2842
Total				£5,837

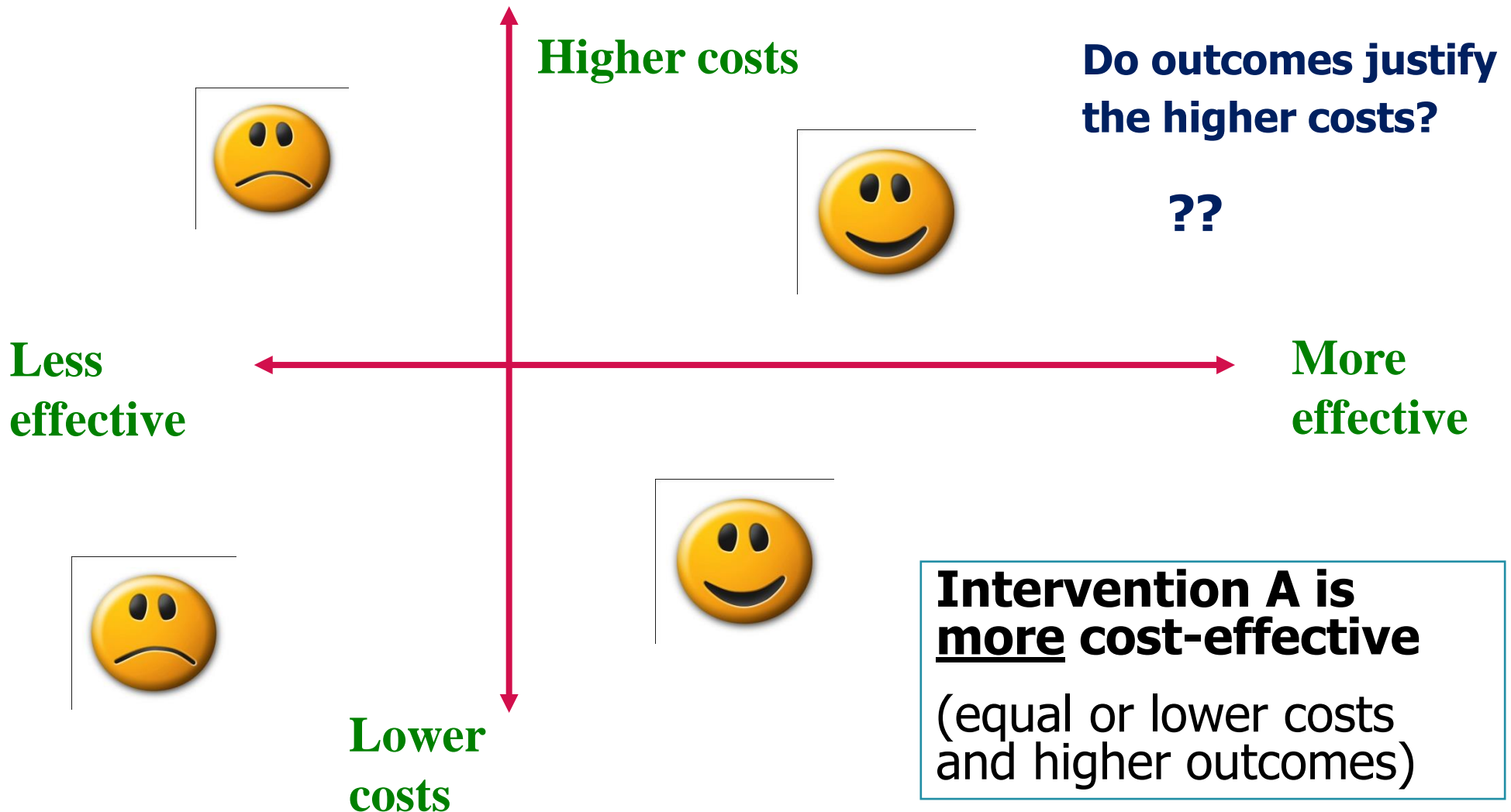
Intervention £1000-£3300 per child; breaks even c5-9 years. BUT – what about roll-out?

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D

**Cost-
effectiveness
analyses:
depression**

Is "Intervention A" more cost effective than TAU?



Cost-effective? Treating depression

(studies similar in study year, c&a age, SSRI)

UK: SSRI v SSRI+CBT

At 28 weeks...

- No sig diff outcomes
- No sig diff costs
- Only a 30% probability that SSRI+CBT more cost-effective than SSRI alone

US: SSRI v CBT v CBT+SSRI

At 12 weeks...

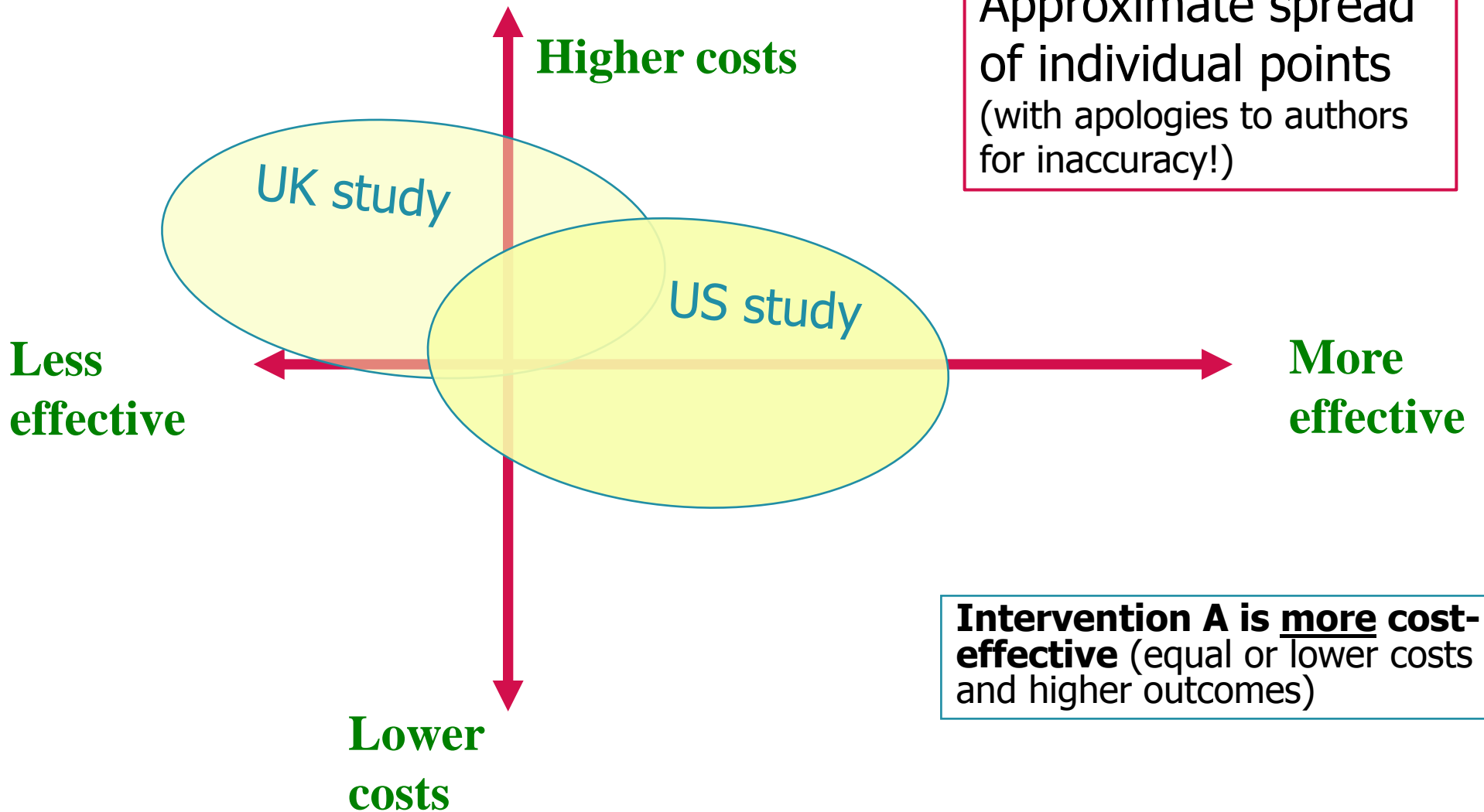
- SSRI alone more cost-effective

At 36 weeks...

- >90% probability that SSRI+CBT (90%) cost-effective than SSRI alone

Is SSRI+CBT more cost effective than SSRI alone?

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Treatment for depression

Good news

- Two studies studying the cost-effectiveness of similar treatment options...
- ... although in different countries with different health care organisation and financing systems.

Bad news

- Conflicting results
- Need more studies of these interventions ...
- And then what about other treatments?

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E

Finale

Quantity, quality & the future

State of the art: quantity 2005-2012

- On average c7 English language 'economic' papers published per year (excl medication only).
- ... across all ages, diagnoses, severity, interventions, countries, etc.
- 4/7 US: One CEA. And 10 per year since 2009 **An improving picture?**
- Link research to practice? Not enough evidence

State of the art: quality 2005-2012

- Quality generally improving compared to earlier reviews
- Methods commonly clearly stated and appropriate to topic and evaluation mode
- Economic evaluation modes appropriate to topic – some tweaking? Perspective; family; unit costs.
- We still don't know enough about what support or treatment to provide; when, where or to whom

The future: from research to clinical expertise

How can economic studies help clinicians

- Costs; for services, for c&a 'packages'
- CEA evidence on interventions helps inform commissioners
- Cost variations analyses help inform providers

How can clinicians help economic studies

- Be open to an economic evaluation
- Be prepared to share cost/finance data as well as outcomes
- Involve an economist early in planning your study