



# The economic consequences of depression and diabetes when co-morbid

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## Outline

- A. Why economics?
- B. Costs
- C. Cost-offset (budget impact)
- D. Cost-effectiveness
- E. Moving forward

## A. Why economics? The underlying problem is ...

# Scarcity

**There are not enough resources to meet all of society's needs or wants**

→ **So society has to choose how to use them (i.e. to ration/allocate)**

→ **Economics looks for ways to make those choices efficiently and fairly**

## When decision-makers make choices

**... they need to know ...**

- what people need and what they want
- what treatments/services can meet those needs
- what staff and other inputs must be employed to deliver those services
- what are the costs of employing them
- what outcomes will be achieved

**Accountants look at costs**

**Economists look at costs and outcomes**

## Example: Treatments for depression ...

### Interventions

Antidepressant medication  
CBT  
Primary care counselling  
Interpersonal psychotherapy  
Couple therapy

## ... lead to better outcomes ...

### Interventions

Antidepressant medication  
CBT  
Primary care counselling  
Interpersonal psychotherapy  
Couple therapy

### Outcomes

Symptom alleviation  
Interpersonal functioning  
Social functioning  
Employment  
Quality of life



### ... and lower long-term costs

Interventions	Outcomes	Cost savings
Antidepressant medication	Symptom alleviation	Lower use of health and social care services
CBT	Interpersonal functioning	Fewer out-of-pocket expenses
Primary care counselling	Social functioning	Greater economic productivity
Interpersonal psychotherapy	Employment	Higher income
Couple therapy	Quality of life	

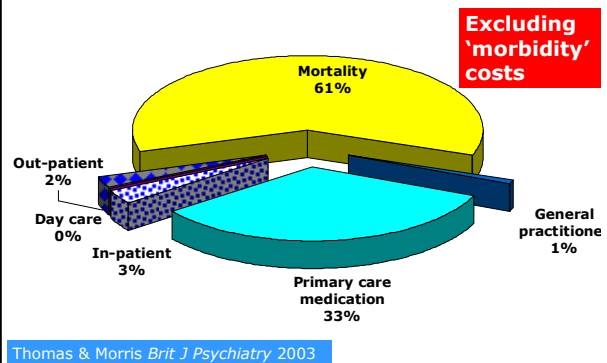
### B. Economic questions: costs

Interventions	Outcomes	Cost savings
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Interpersonal psychotherapy	Employment	Higher income
Couple therapy	Quality of life	

### Costs of co-morbid depression and diabetes are wide-ranging

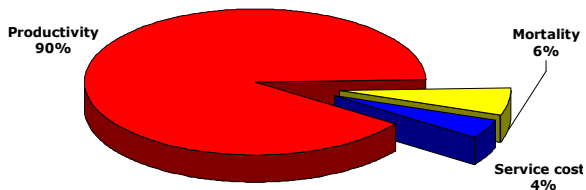
- Depression treatment
- Diabetes treatment
- Other health care and other services
- Lost productivity – unemployment, absenteeism, presenteeism ...
- ... hence lower earnings / income
- Premature mortality
- Carer health and treatment
- Carer productivity

### Costs of depression (adults) in England, 2000



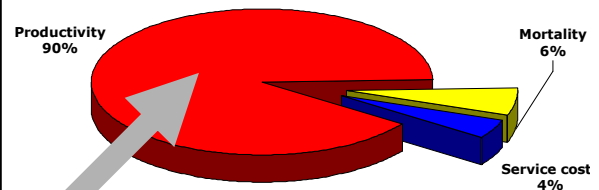
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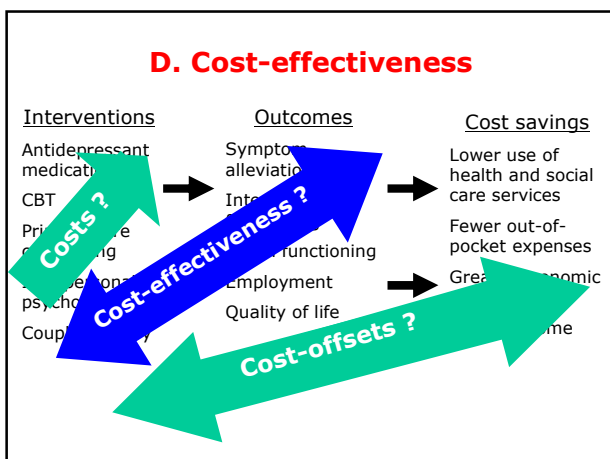
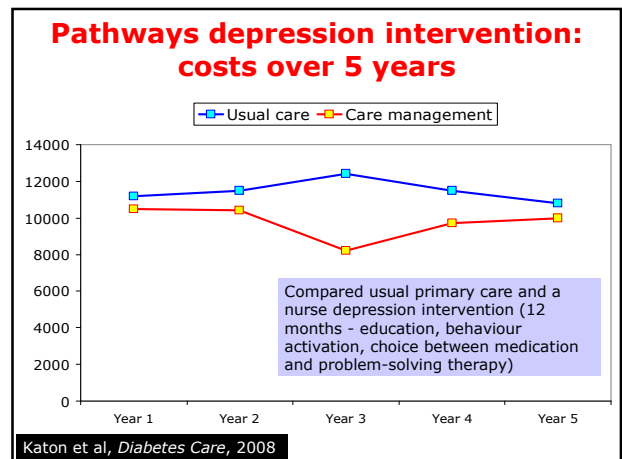
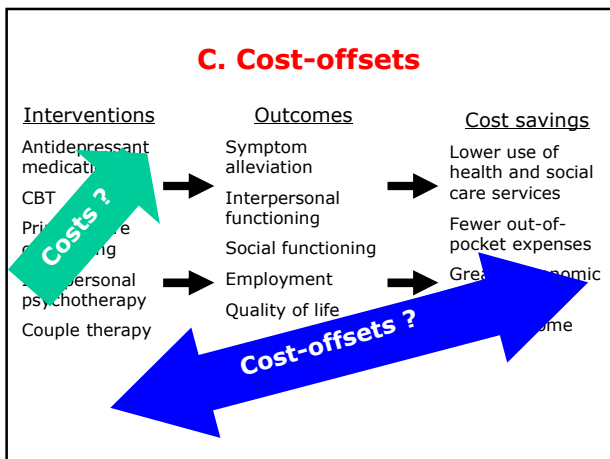
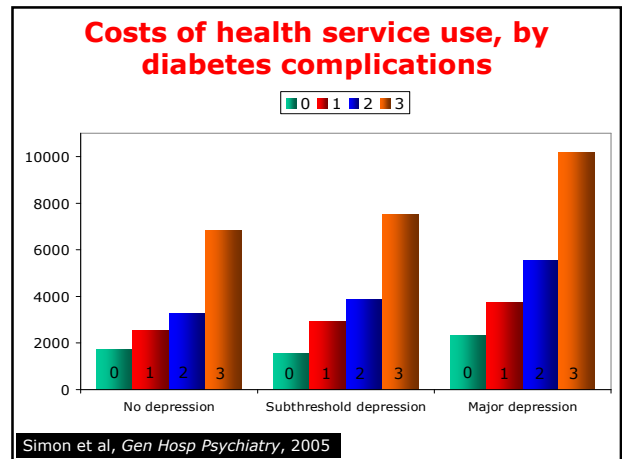
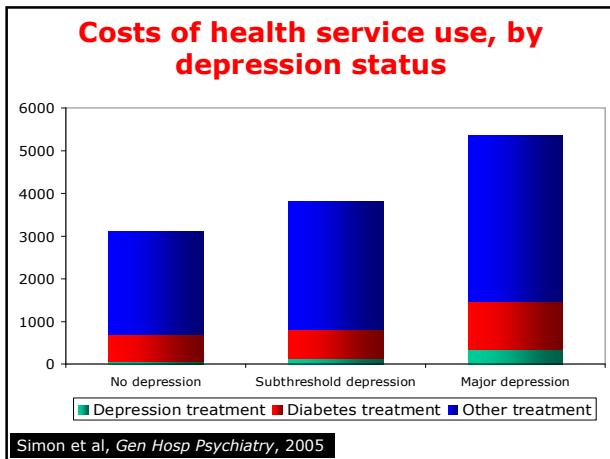
Total cost = £9 billion



### Costs of depression (adults) in England, 2000

Total cost = £9 billion





**If the core clinical question is:**

→ → **Does this treatment work?**

**Then the core economic question is:**

→ → **Is it worth it?**

**And the 'Is it worth it?' question applies especially when an intervention:**

- **is more effective**
- **but also more expensive**

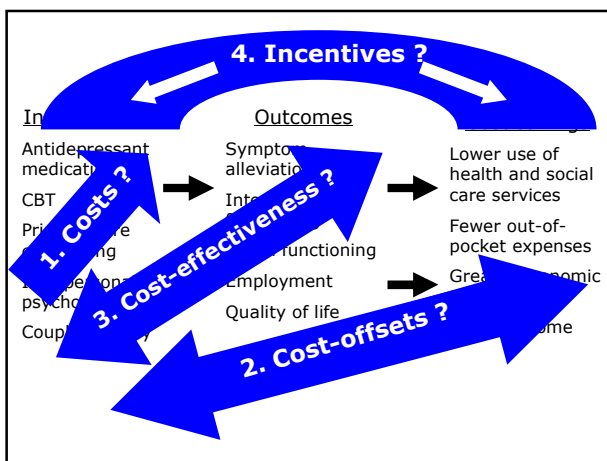
**Do the better outcomes justify the higher costs?** (Relative to the other ways in which those resources might be spent)

### **Cost-effectiveness evidence**

There is some, but still not a lot, and not much outside the US:

- Screening diabetes patients for depression
- Nurse-led collaborative care model (Katon et al, *Diabetes Care* 2006)
- Systematic stepped-care model (Simon et al, *Arch Gen Psych* 2008)
- Other studies are underway currently

Molosankwe et al, paper in preparation as part of DDD initiative



### **Moving forward – we need**

- to be better at recognising the **economic consequences** of co-morbidity
- to be better at **coordinating treatments** and services
- to help decision-makers find **affordable options**
- but also to remind them that better outcomes are often **worth paying for** – in comparison with other ways of spending available resources