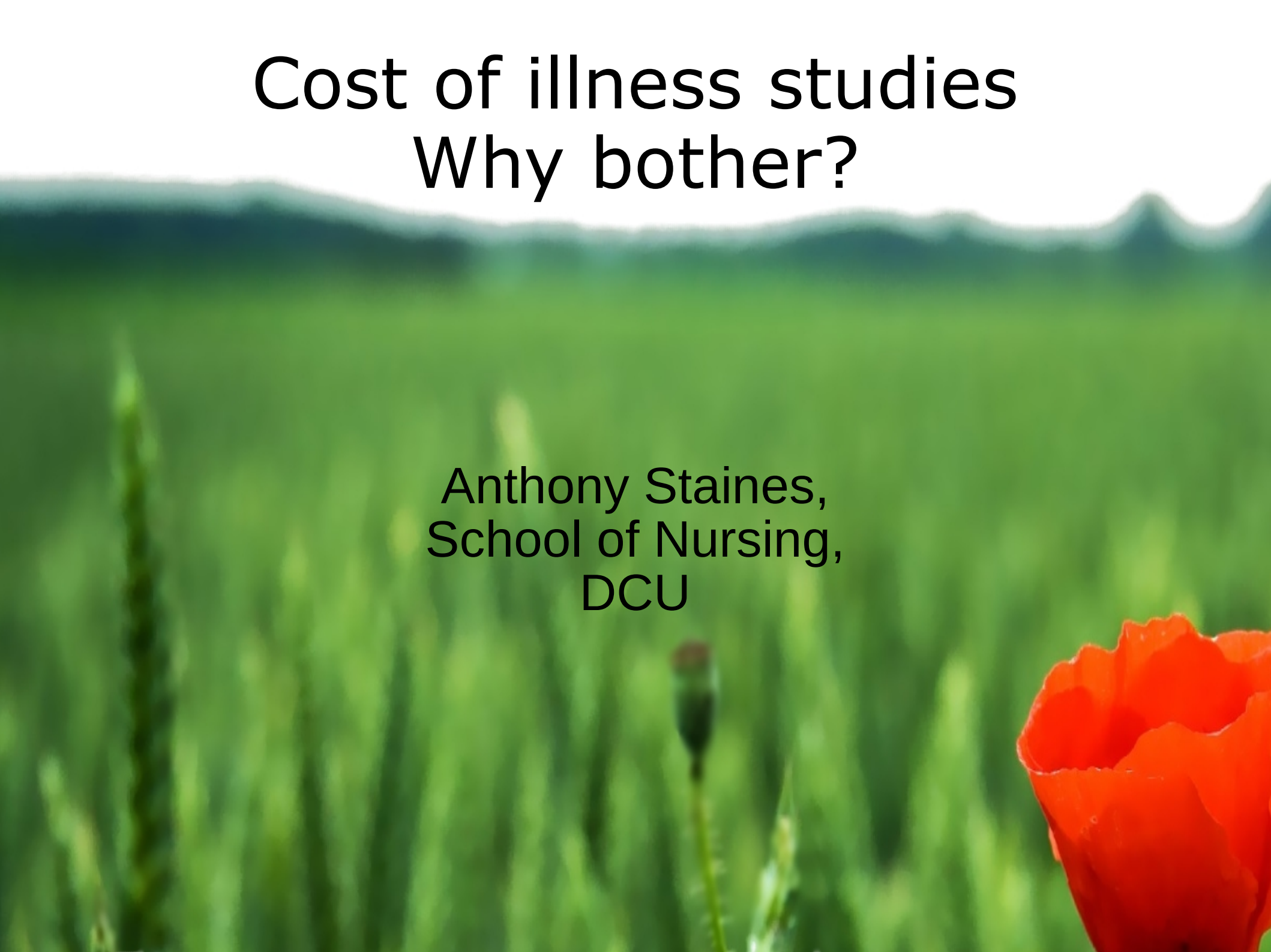
# Cost of illness studies
# Why bother?



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# Summary

- What are we talking about?
- What are the obstacles?
- Why bother?

# We?

# The team

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# What are we talking about?

- Cost-of-illness (COI) studies

# What is a COI study

- Cost of illness studies typically aim to identify and measure the costs associated with a particular disease.
- Identify the cost-generating components
- Attribute a monetary value to them

# Costs – a digression

- A major challenge for researchers in Ireland
- A nightmare for managers and planners in HSE and elsewhere
- We don't have them

# Costs in Ireland

- There is no system, never mind a uniform system, for deciding how much it costs HSE to do anything
- Every single health economics study in Ireland does its own costings
- HSE generally does not do good costings, for their business plans
  - HSE is not unique in this
- We need to fix this...

# Whose costs?

# Who incurs costs?

- Patients
- Families
- Carers
- Friends
- Employers
- Society

- Finance
- The Health service
- HSE
- The hospital
- The laboratory
- The doctor

# Whose perspective

- Traditionally take a health service perspective
- More recently take a societal perspective
- All costs considered
- There are no true externalities in a finite universe, only under-motivated accountants

# Societal Perspective

- Costs to whoever they fall
- Particular focus on patient and caregiver costs.
  - e.g. Hartunian et al (1980), Stroke, males between 35-64 account for 15% of incidence, yet this group incurs 52% of all forgone earnings

# What costs?

- Direct Costs-value of resources used
  - e.g. hospitalization, GP visit, medication
- Indirect Costs-productivity losses
  - e.g. time lost from work

# How much time?

- Lifetime perspective
- Somewhere in between
- Short term perspective
  - e.g. Autistic spectrum disorder

# Cost of Illness-Methodology

- enumeration of relevant costs
- the measurement of costs
- the explicit valuation of costs over time

# Benefits

- Useful policy decision-making tool
  - e.g. National, WHO, World Bank
- Provides of estimates of societal spending on a given disease
  - and thus amount which could be saved by effective prevention

# Benefits

- Provides detailed breakdown of the cost components and the sector's contribution
- Determines research and funding priorities
  - Where information gaps exist
- First step in economic evaluation process

# Limitations

- Identification of high expenditure while indicating the costs tell us nothing about inefficiency or waste
- May not get good information on prevention costs
  - treatment may be high, but less than prevention costs!

# Limitations

- Lack of comparability of findings
  - e.g. Pharamcoeconomics March 2009 – Breast cancer
- Some elements not easy to capture
  - e.g. functional status, psychological impact
- Can be hard to do outside trial settings

# Difficulties

- Hard to do well
- Easy to do badly
- Easy to game
- Bit like RCTs twenty years ago, and for similar reasons

# So why bother?

# Current crises

- HSE is a mess
- People might be coming to Ireland to look at our truly weird health services
- They have to cut a lot of money, very fast

# Evaluation is tough

- We haven't time to think
- It will cost too much
- Our brains hurt

# Traditional response

- Cut staff
  - A lot of front-line care is delivered by people on short term contracts
- Offer non-targeted redundancy
- Cut overtime
- Cut travel
- Cut chocolate biscuits...

# Won't work

# Really won't work

- Would you expect it to?
- Often adds yet more perverse incentives to a tottering pile of them

# There is an opportunity

# There is at least one famous paper in health economics

- What do we gain from the sixth stool guaiac?
- Neuhauser D, Lweicki AM.
- N Engl J Med. 1975 Jul 31;293(5):226-8.
- The six sequential stool guaiac protocol has been advocated for screening of colonic cancer. Analysis of the expenditures involved shows that the cost of rises exponentially so that the marginal cost of the sixth test may be 20,000 times the average cost.

May be more than one!

Anyway,

# There is an opportunity

- We spend about €16.5 billion a year
- A disturbing proportion of this is effectively the sixth stool guaiac in disguise

# Example

- Coronary heart disease prevention: insights from modelling incremental cost effectiveness Marshall BMJ 2003
- Shows potential for huge savings from more rational sequencing of drug use in cardio-vascular disease

# There is an opportunity, and it's worth chasing

- The current financial crisis is a good opportunity for economics to be taken more seriously in policy making
- It's worth bothering about

# Cost of illness?

- Provides a basic frame for making policy decisions
- If consistent systems are used can integrate nicely with HTA and Trial data
- Fundamental to making the case for development and funding
- Maybe the time has come?