## **Economics of KT**

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### Joan Robinson said in 1955

"The purpose of studying economics is not to acquire a set of ready-made answers to economic questions, but.....

....to learn how to avoid being deceived by economists."

#### **Archie Cochrane:**

"If we are ever going to get the 'optimum' results from our national expenditure on the NHS we must finally be able to express the results in the form of the benefit and the cost to the population of a particular type of activity, and the increased benefit that would be obtained if more money were made available."

Cochrane AL. Effectiveness and Efficiency: random reflections on health services. Nuffield Provincial Trust, London, 1972.

#### The Role of Health Economics

#### To provide

- a way of thinking
- a set of techniques

To assist decision making, usually in the health care sector, to promote

- efficiency
- equity

Health economics is about maximizing social benefits subject to the constraint imposed by resource availability within the health system

### **Economics of KT**

- Suggest two questions to think about:
  - When assessing specific KT strategies, how can both costs and benefits be quantified?
  - When allocating health care resources, what role does KT play?
- To my knowledge, not that much work done on either of these questions to date

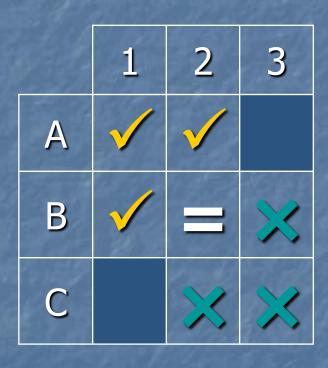
- Comparative assessment of one or more treatments/ services/ technologies in terms of both costs and benefits
- Measure benefit: clinical measures, quality of life, quantity of life, willingness to pay
- Measure costs: anything in the treatment pathway that has a draw on resources (out of pocket or government pay)
- Combine costs and benefits: balance sheet approach; incremental cost effectiveness ratios

- For costs and benefits of a KT strategy, think of the strategy as the 'intervention'
- Measure benefit and costs of given strategy as compared to not having the strategy (historical or concurrent control)
- Benefit: uptake/ utilization of knowledge, change in clinical practice, personal or organizational behaviour change...
- Cost: strategy development and implementation, direct and indirect health care costs
- Compare costs and benefits with and without KT strategy to determine relative value of the strategy

- E.g., new research on treatment of frail elderly available for one year, decision to introduce a specific KT strategy to improve uptake and knowledge transfer
- KT strategy: facilitated workshop with key clinical leaders and policy makers
- Study design: pre-post with sample serving as own controls; pre period, research available but no explicit KT attempts made; post period, research available and KT strategy implemented
- Benefits: measure of quality of life pre-post strategy implementation
- Costs: Facilitated workshop, human resources, materials, etc; health care utilization pre-post; out of pocket costs pre-post... average cost per patient
- Determine: did the cost of the strategy plus post-strategy utilization and other costs increase or decrease as compared to pre-strategy period; did the quality of life go up or down in post-period as compared to pre-period

**Effectiveness** of KT strategy relative to control (1 more; 3 less)

Cost of
KT strategy
relative to control
(A less; C more)



- Recommend KT strategy
- **X** Recommend 'control'
- = Neutral
- Judgement required

See: Vale L et al. Health Econ 2000;9:337-51

- Determine aim and scope of activity
- Identify and map resource use
- Form an advisory panel
- Define and weight decision making criteria
- Identify options for investment and disinvestment
- Evaluate investments and disinvestments
- Validation and recommendations
- Communication, evaluation, revision

Rating options against pre-defined criteria

Stakeholder Input The Community Staff / Doctors Board

Population Needs

Provincial
Requirements
/ Targets

Determining
Operational Priorities:
Identifying Margins
for Change

Business Plan Priorities

Practice
Guidelines &
Standards

Service Utilization Financial data

Outcomes and economic research studies

#### Primary benefit

 Achieving real resource shifts that are consistent with strategic decision-making objectives

#### Secondary benefits

- Culture change towards evidence driven decisions
- Ownership of planning process
- Transparent and defensible decision making
- Clinician engagement and partnership

- Explicit framework for priority setting can be used as a 'vehicle' for getting evidence into the hands of decision makers when allocating resources
- Could examine in different contexts:
  - As a starting point, what is meant by 'evidence'?
  - Did different allocation decisions result whether explicit framework was used or not?
  - Would results have been the same if framework was used in two cases but in one case the process was based on best available evidence and the other was based on gut feel assessments

## **Economics of KT**

- Early days but suggest two lines of inquiry:
  - More rigorous assessment of costs and benefits of specific KT strategies, whether designed for clinical or policy levels
  - Better understanding of the interplay between evidence and other inputs into decision processes around priority setting and resource allocation decisions

