



HEALTH
ECONOMICS
UNIT



Introduction to Pharmacoeconomics and Health Technology Assessment

Fundisa Workshop 8th – 9th October 2019

HEALTH TECHNOLOGY ASSESSMENT FOR MEDICINES IN SOUTH AFRICA

Tommy Wilkinson

Health Economics Unit

School of Public Health and Family Medicine

University of Cape Town

Overview

- Health Technology Assessment/Pharmacoeconomics
- Economic evaluation for UHC
- Key concepts:
 - ICER
 - Generalised health outcomes (eg QALY)
 - Threshold
- HTA and “accountability for reasonableness”



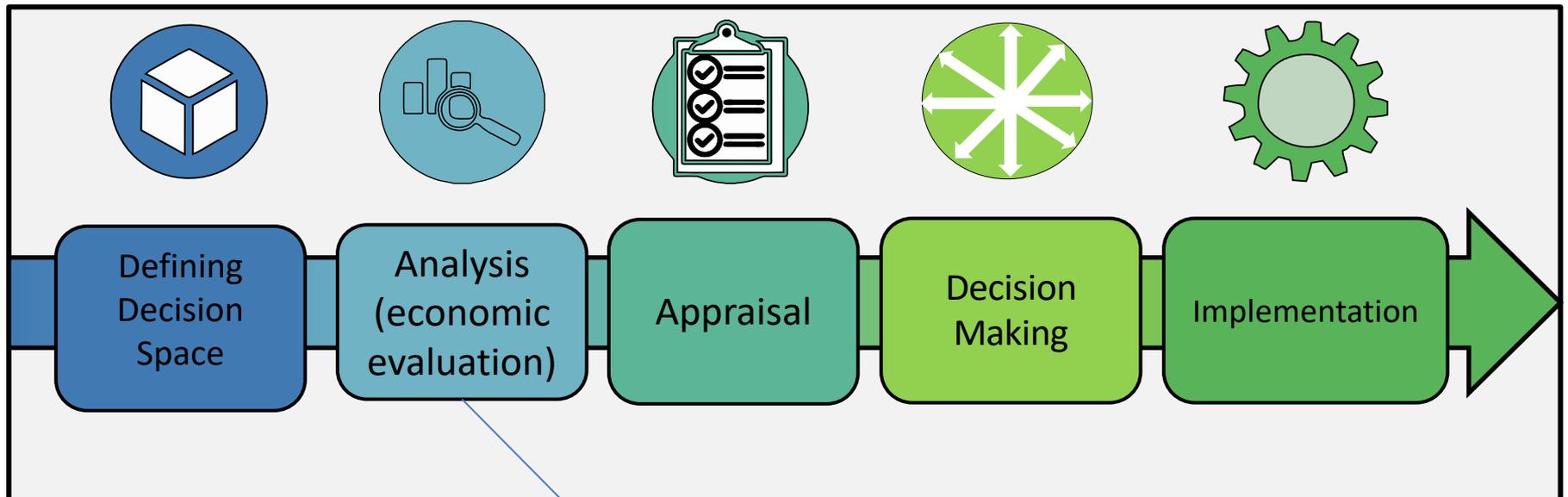
What is a health technology?

A health technology is any intervention that may be used to promote health, to prevent, diagnose or treat acute or chronic disease, or for rehabilitation and palliative care.

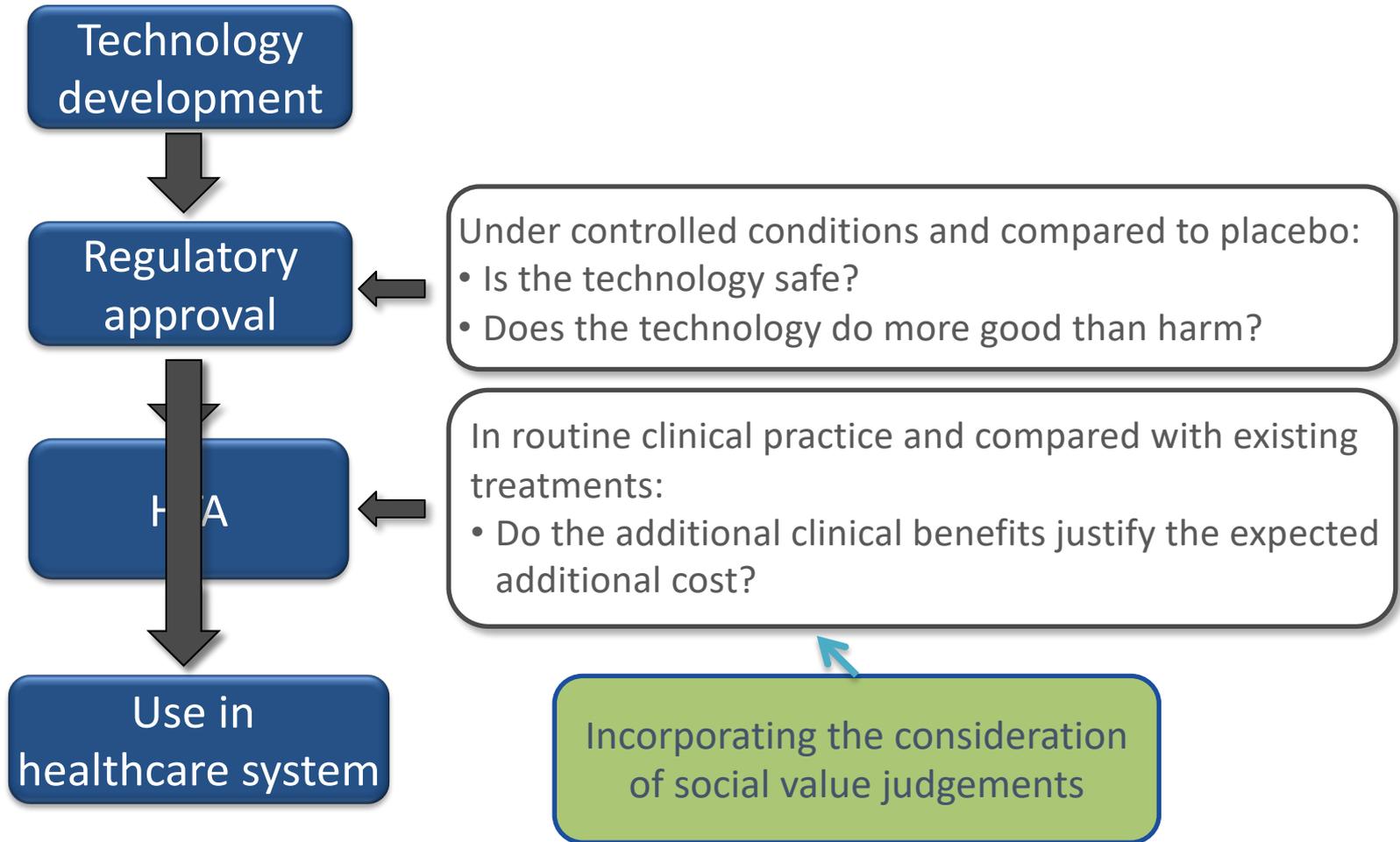
What is Health Technology Assessment?

HTA is the systematic evaluation of properties, effects and/or impacts of health technologies and interventions. It covers both the direct, intended consequences of technologies and interventions and their indirect, unintended consequences (WHO)

The HTA process – where economic evaluation meets decision making



Pharmacoeconomics is
economic evaluation as
applied to pharmaceuticals





World Health Assembly HITA resolution 67:23

SIXTY-SEVENTH WORLD HEALTH ASSEMBLY

WHA67.23

Agenda item 15.7



24 May 2014

Health intervention and technology assessment in support of universal health coverage

*“Urges member states to consider establishing national systems of **health** intervention and **technology assessment**, encouraging the systematic utilization of independent health intervention and technology assessment in support of **universal health coverage** to inform policy decisions”*

HTA for Universal Health Coverage (UHC)

Universal Health Coverage: Ensuring that all people can use the promotive, preventative, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship

Three dimensions:

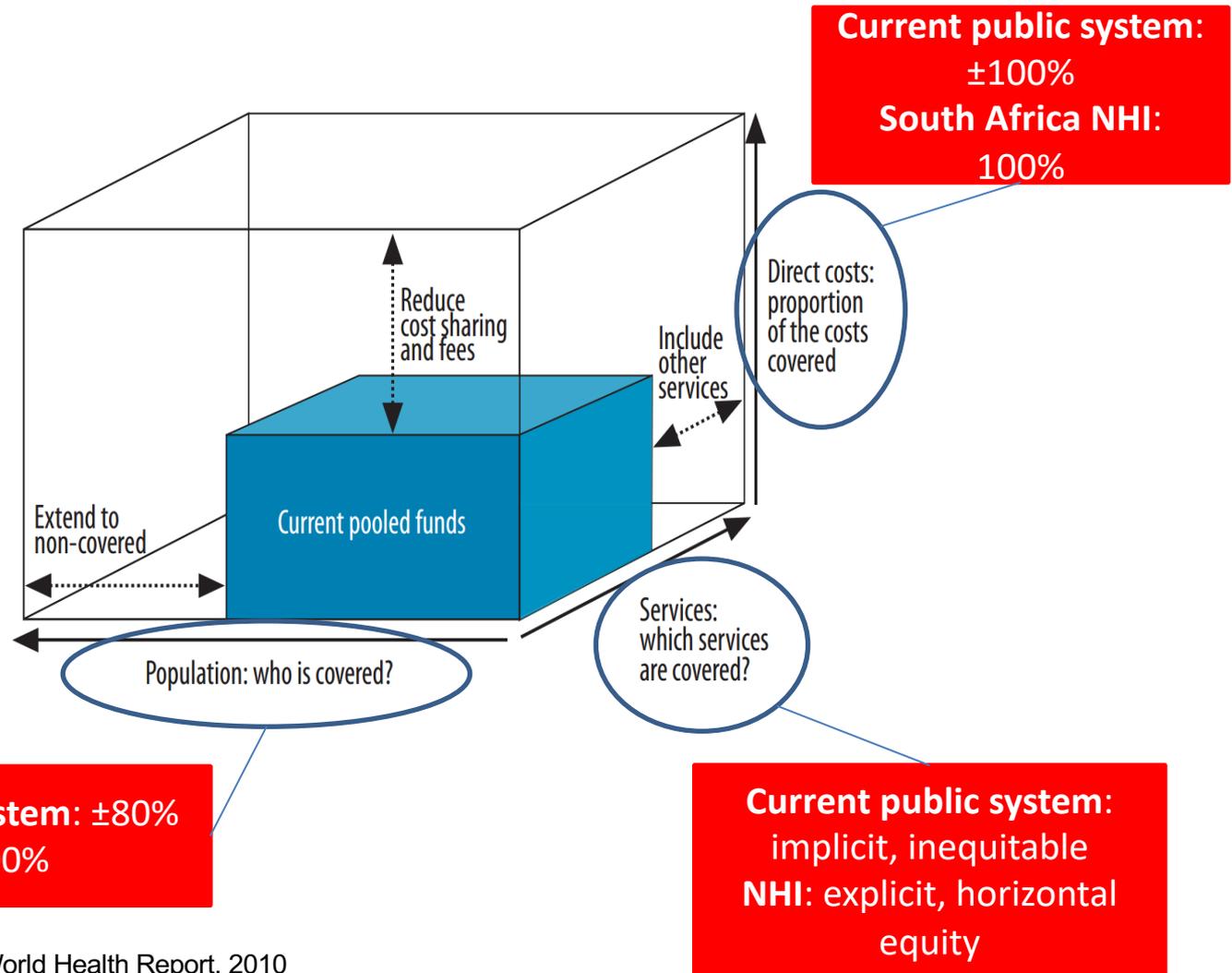
- **equity in access** to health services - those who need the services should get them, not only those who can pay for them;
- the **quality of health services** is good enough to improve the health of those receiving services;
- **financial-risk protection** - ensuring that the cost of using care does not put people at risk of financial hardship.

Universal Health Coverage: three critical questions

Who is covered?

How much is the
co-payment?

What benefits are
covered?



Assessing efficiency: the Incremental Cost Effectiveness Ratio

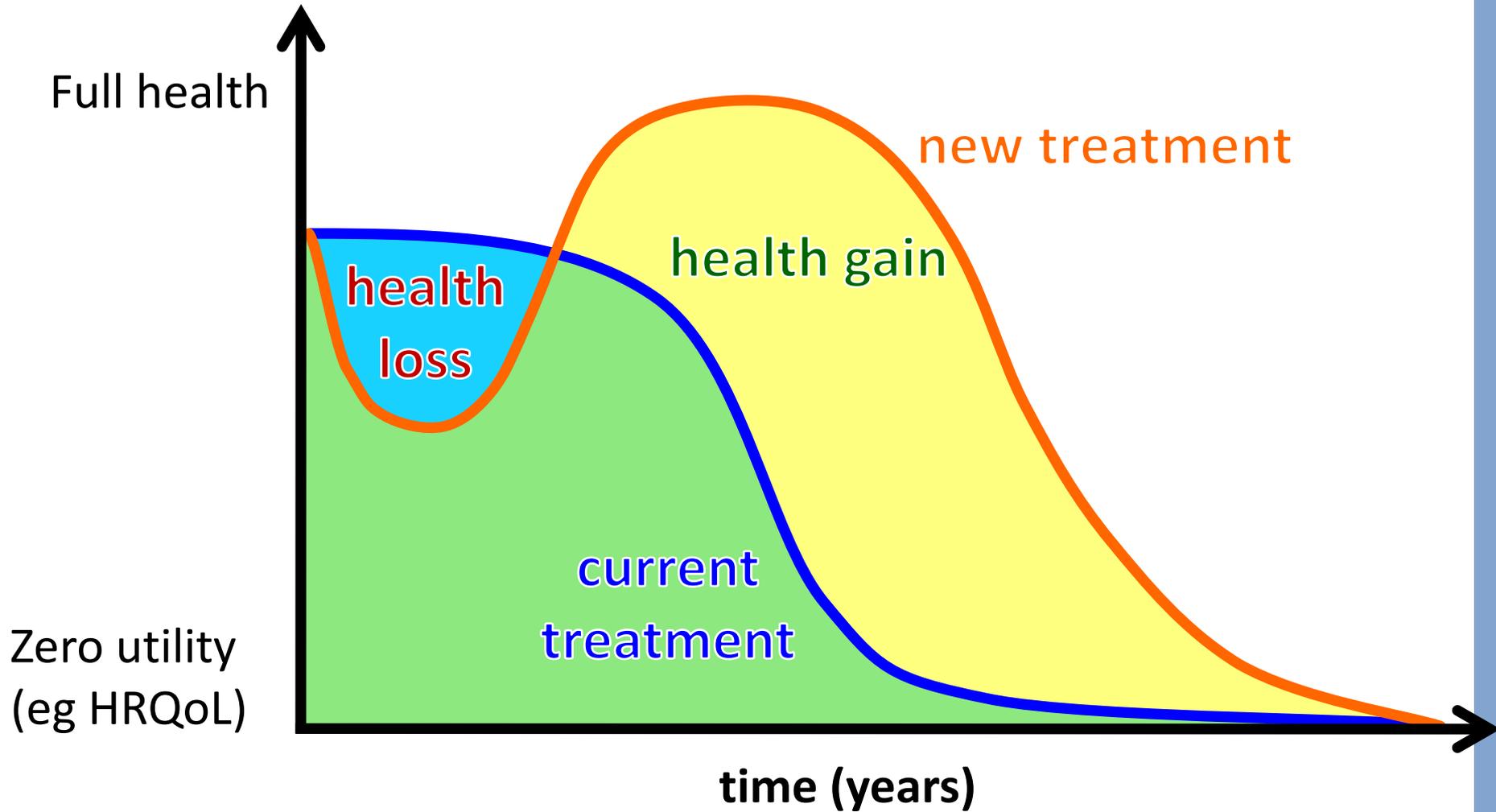
Weighing up the benefits, harms and costs

$$\frac{\text{cost}_{\text{new}} - \text{cost}_{\text{current}}}{\text{health gain}_{\text{new}} - \text{health gain}_{\text{current}}}$$

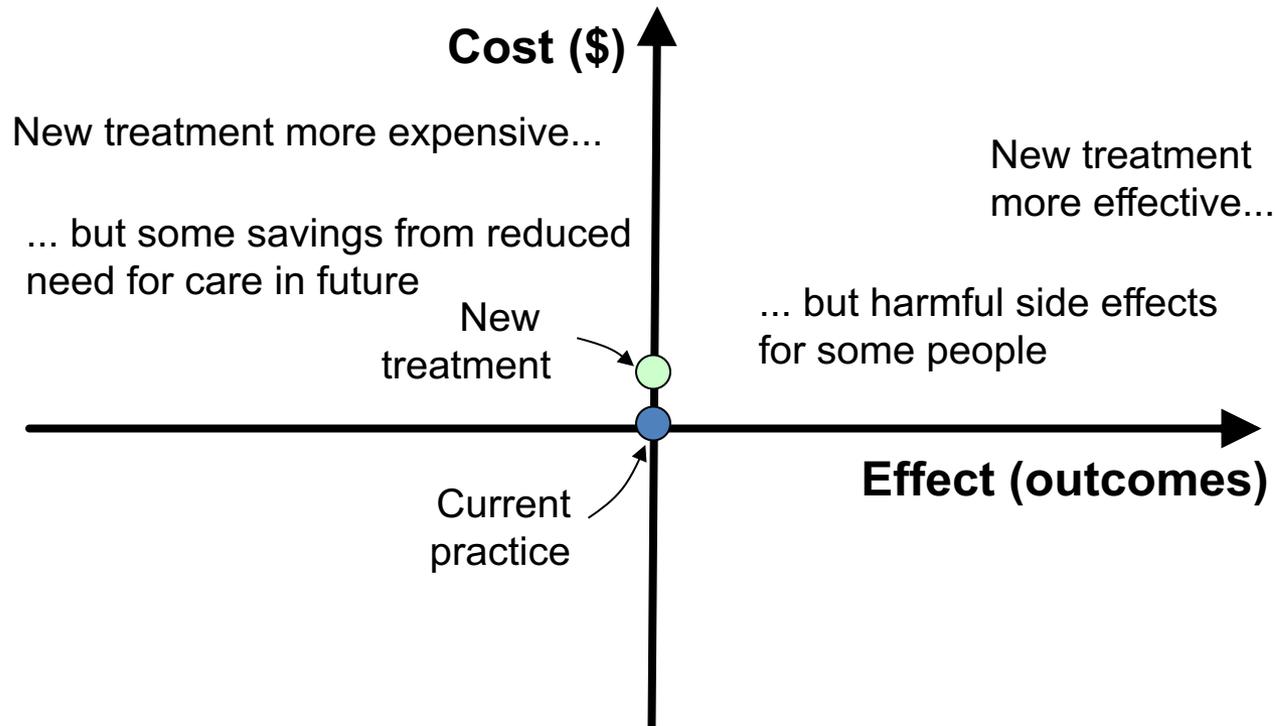
Health gain can be expressed in any metric that suits the nature of the decision or the needs of the decision maker – e.g. hospitalisations avoided, life years gained, no. of people successfully initiated on treatment.

A generalised measure that takes into account length and quality of life eg Disability Adjusted Life Years (DALYs averted) allows comparability across decisions and consideration of allocative efficiency

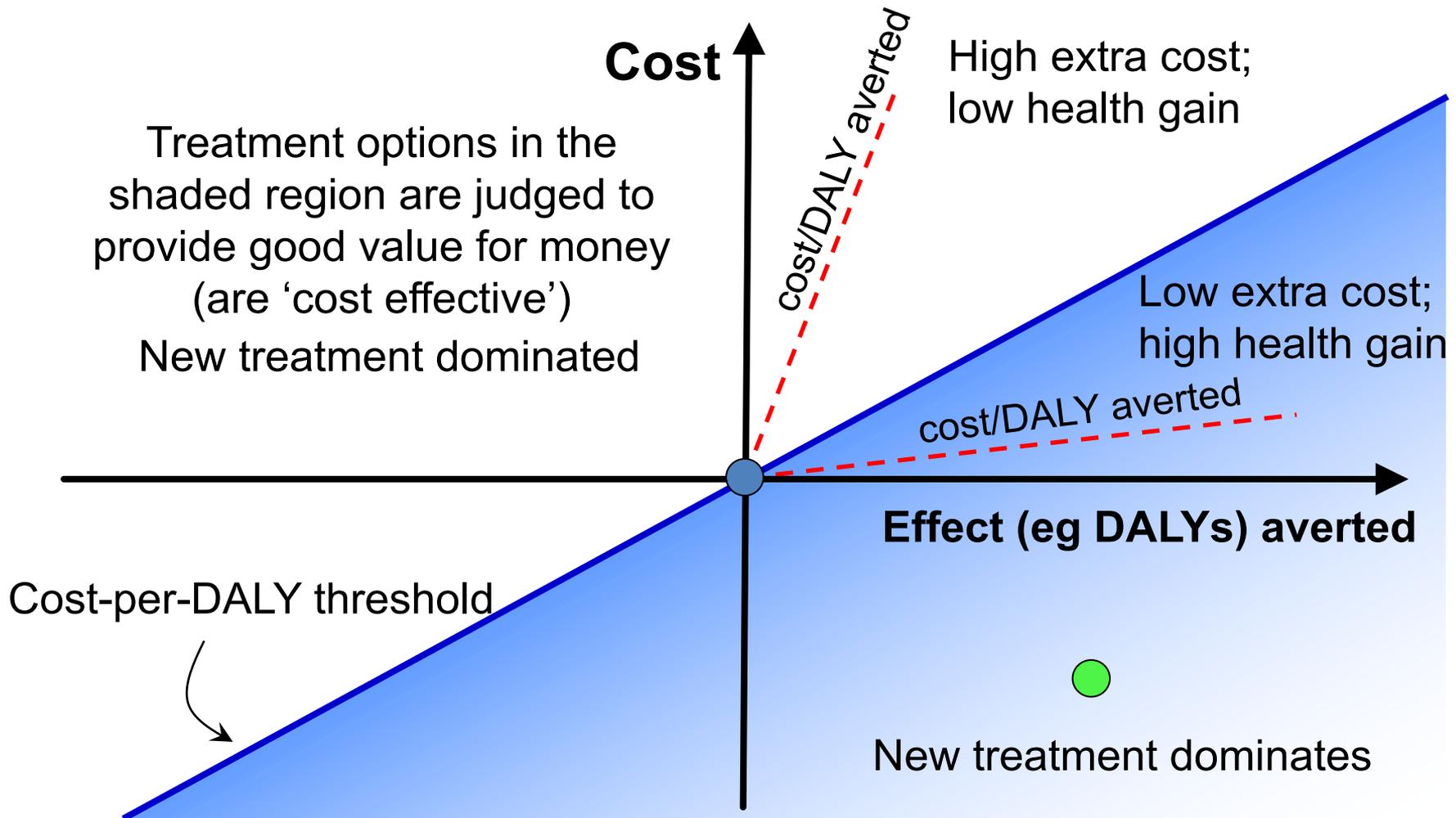
Generalised measure of health outcome



How do we use the ICER to assess value for money?



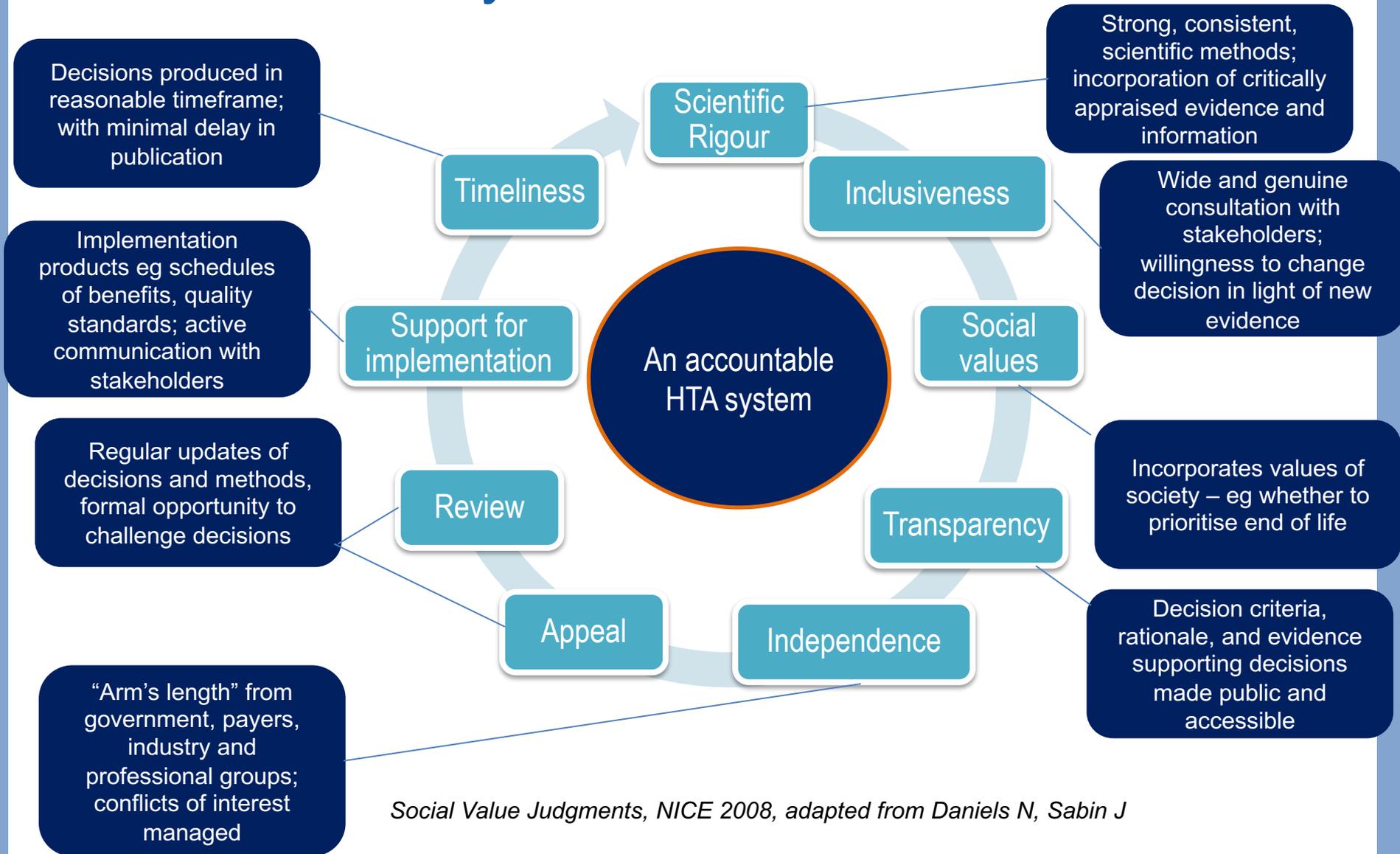
How do we use the ICER to assess value for money?





One in, one out?

HTA: facilitating accountability for reasonableness



Social Value Judgments, NICE 2008, adapted from Daniels N, Sabin J