

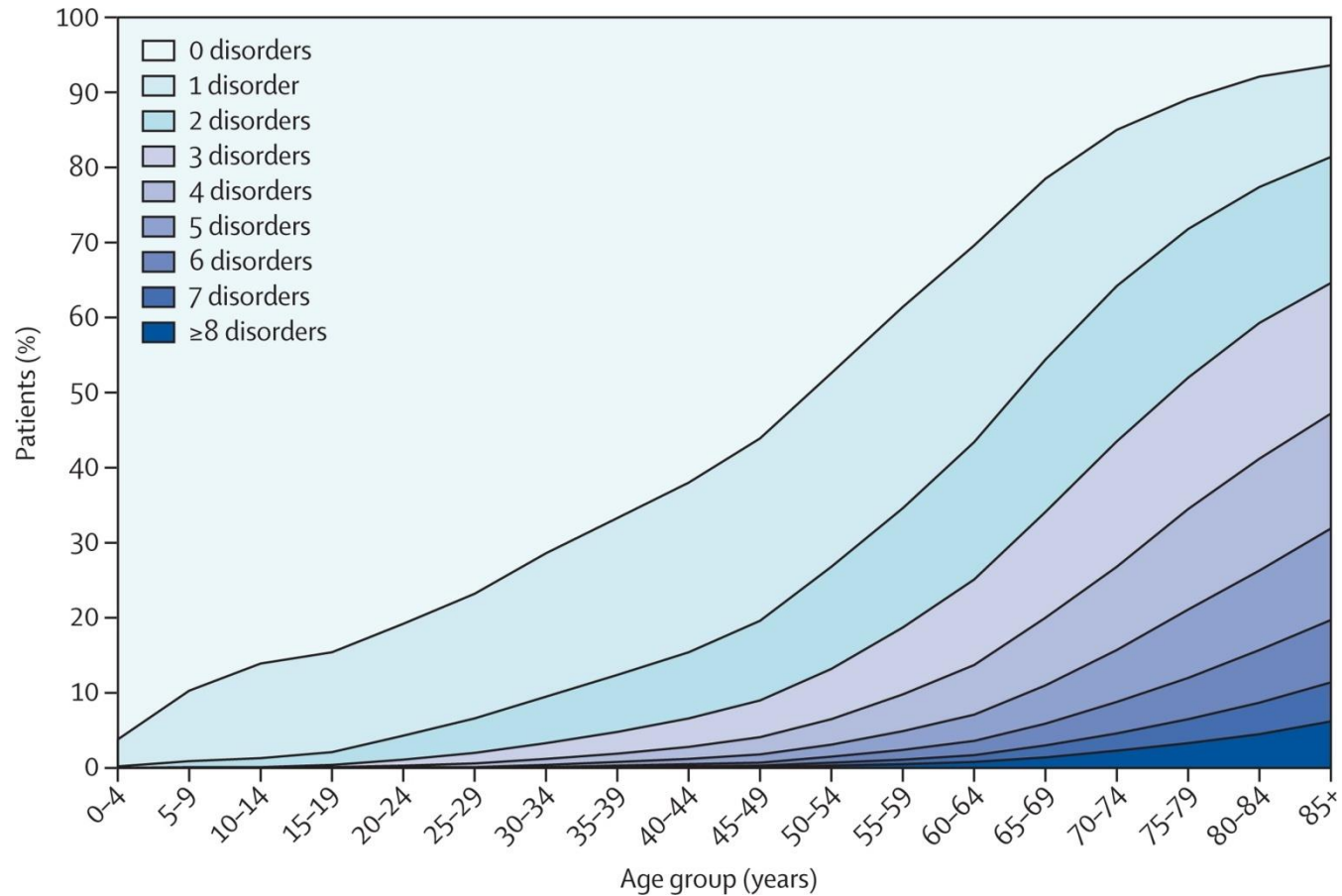
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Medicines Optimisation and Medicines Management

Definitions

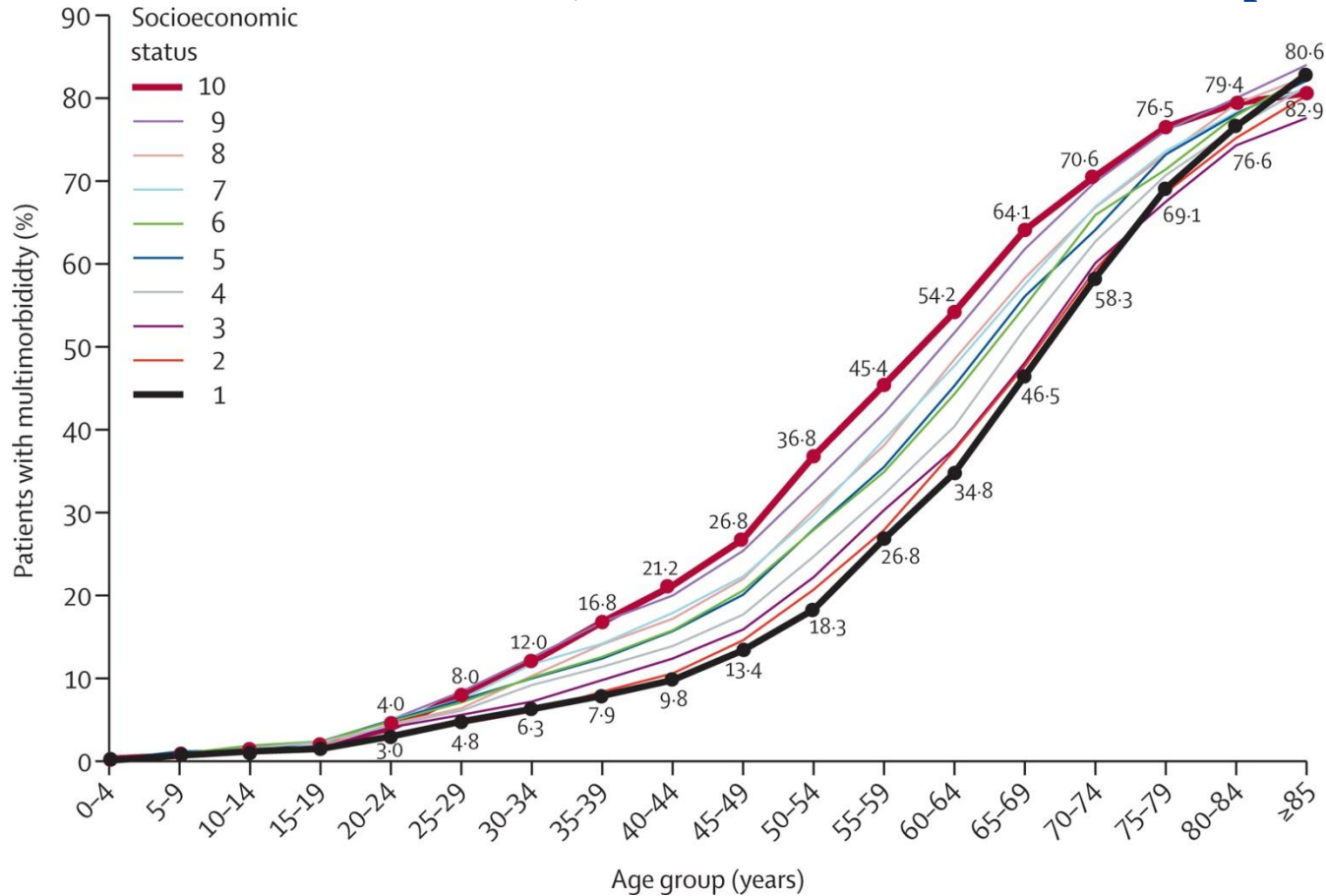
- A chronic condition is one that lasts a year or more and require ongoing medical attention and/or limits activities of daily living. - physical or mental
- Persons with multimorbidity have two or more concurrent chronic conditions that collectively have an adverse effect on health status, function, or quality of life and that require complex healthcare management, decision-making, or coordination.

Figure 1 - Number of chronic disorders by age-group



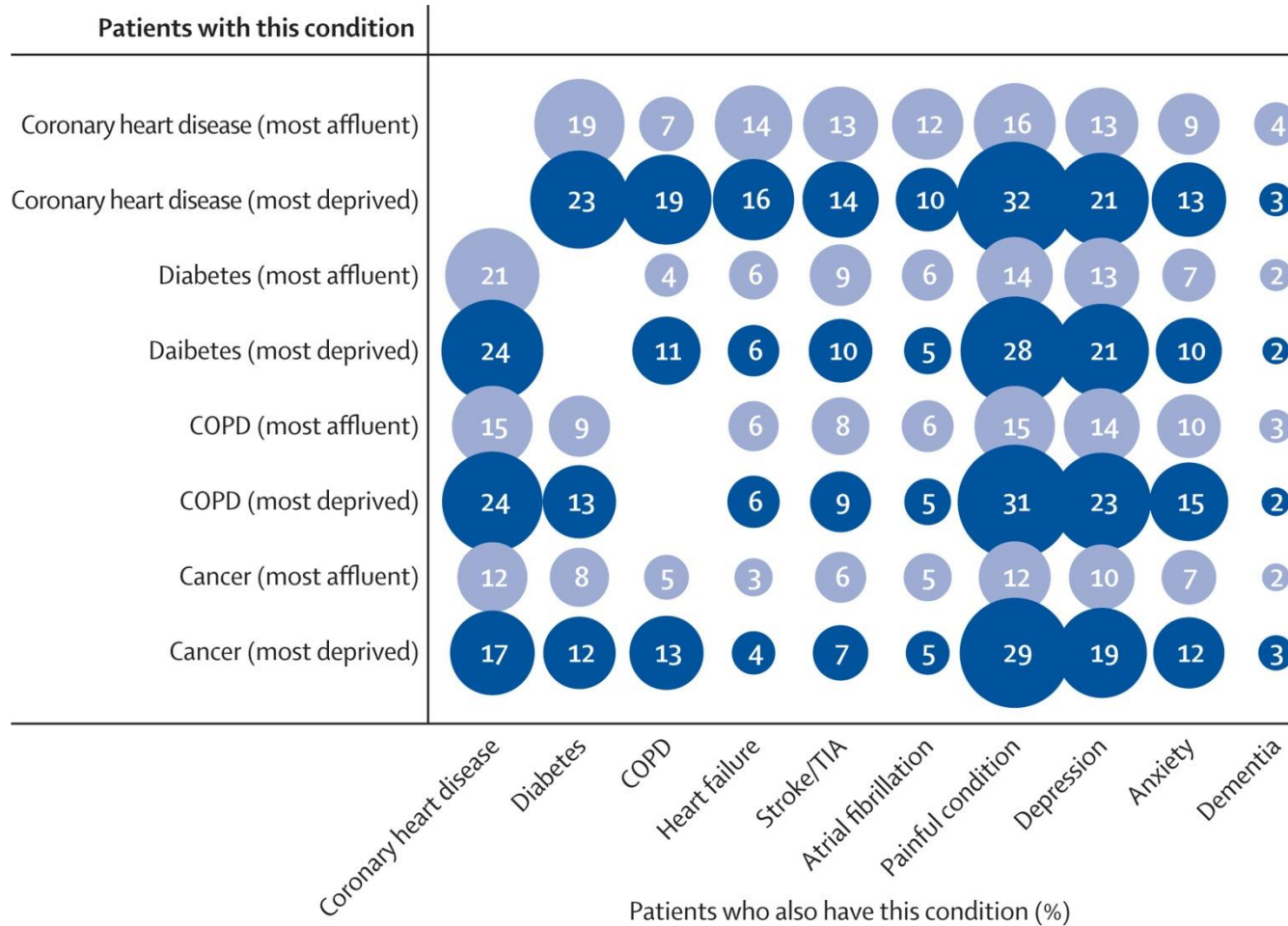
Barnett K et al (inc Guthrie) Lancet: Volume 380, No. 9836, p37-43, 7 July 2012

Figure 2 - Prevalence of multimorbidity by age and socioeconomic status
On socioeconomic status scale, 1=most affluent and 10=most deprived.



Difference from 1 to 10 in SE status = 10-15 years

Figure 4 -Selected comorbidities in people with four common, important disorders in the most affluent and most deprived deciles



Inter-relationships of MM

Conditions may be found together because

- one can be caused by the other (for example, diabetes can cause chronic kidney disease)
- they share a common biological etiology (for example, smoking , lung cancer and coronary heart disease).
- they are distinct but both commonly accompany LTC
 - eg depression
- they both common in the same socioeconomic group

Clinical decision making with any patient

Ethical principles which guide our treatment decisions

- promotion of autonomy
- beneficence
- non-malificence
- equity

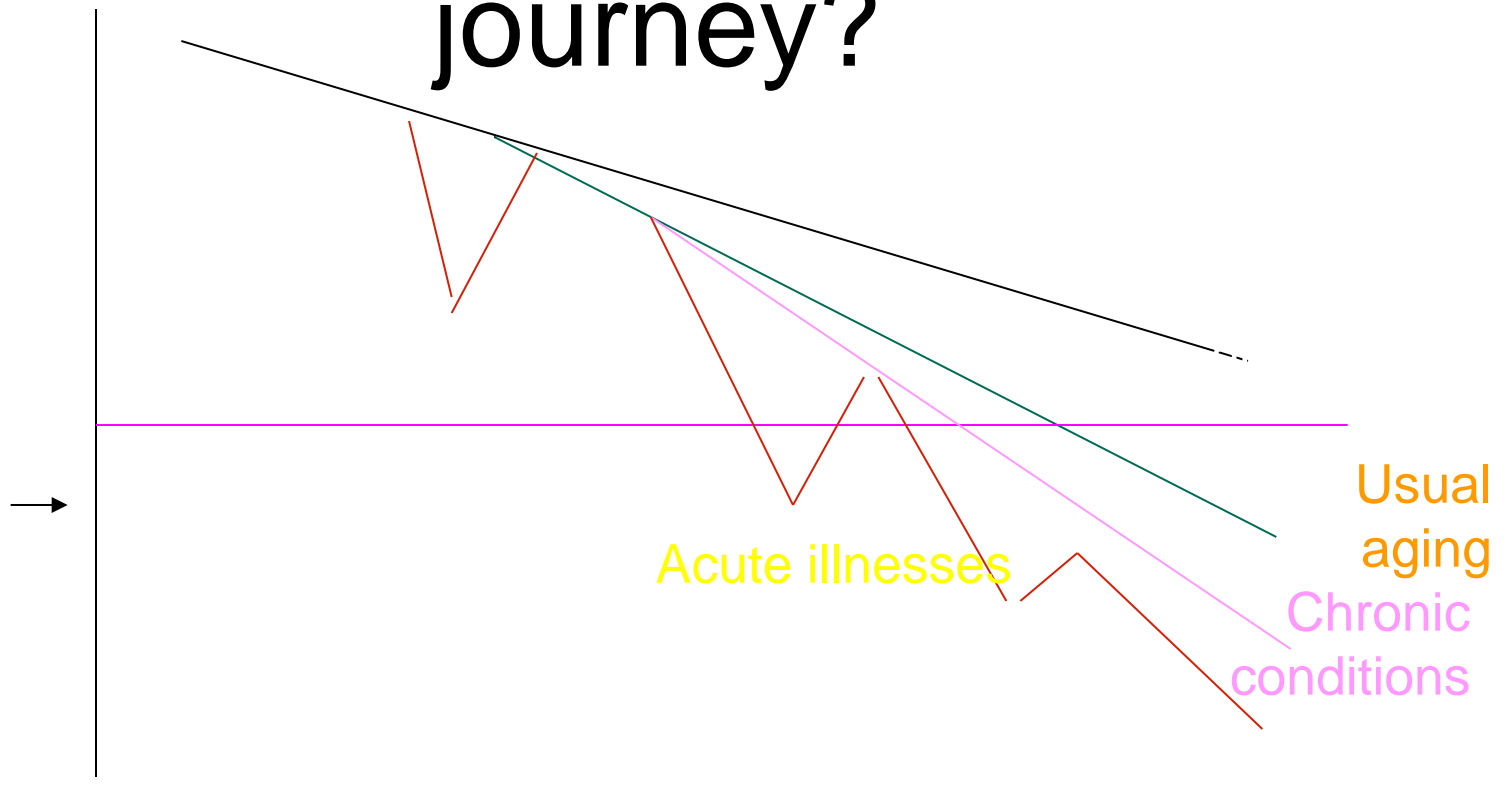
1. Is the treatment worthwhile?

What are the potential benefits ?

What are the potential dysbenefits ?

We must first consider the person and the context

Where is the patient in this journey?



The clinical situation will determine the treatments potentially available

- curative
- disease modifying but not curative
- symptomatic
- watch and wait
- a combination of these

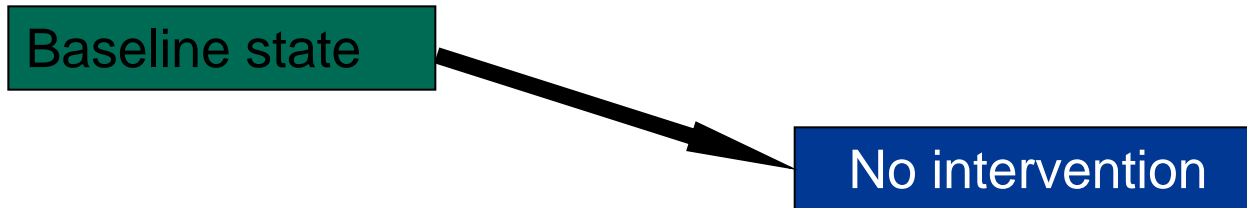
There are several relevant benefits

- Symptom reduction
- ADL dependency
- Life expectancy

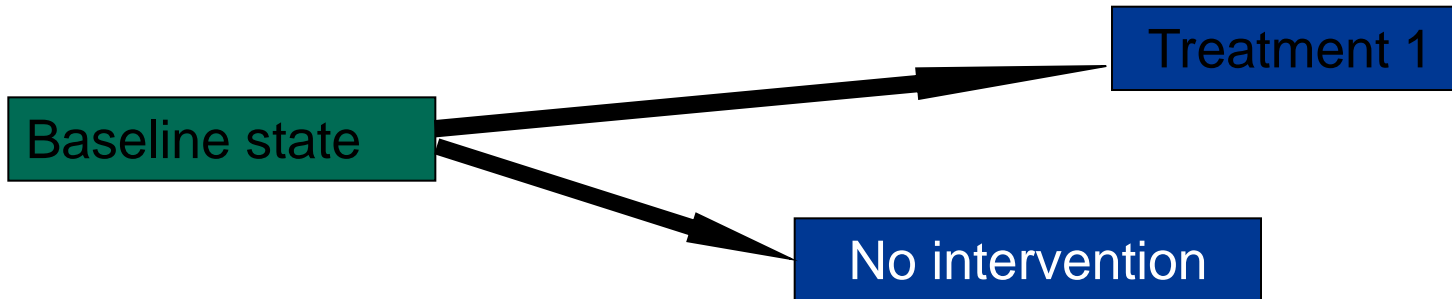
The doctor's responsibility is

- to judge, and then communicate to the patient, the likely outcomes of various courses of action, including the treatments on offer.
 - What is likely to happen without medical treatment?
 - The contribution of this morbidity to this likely outcome
 - How will the treatment affect the patient's outcomes - symptoms, health and life span?
 - What are the likely risks and side effects of treatment?
 - How much disruption to normal life or discomfort will the treatment produce (burden)?

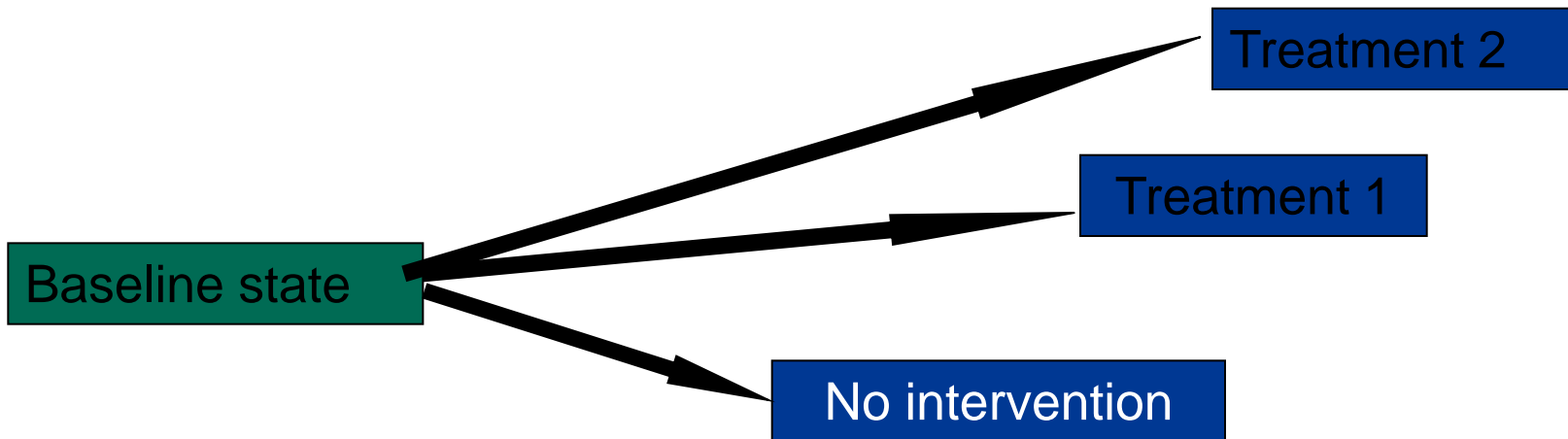
PREDICTING OUTCOMES



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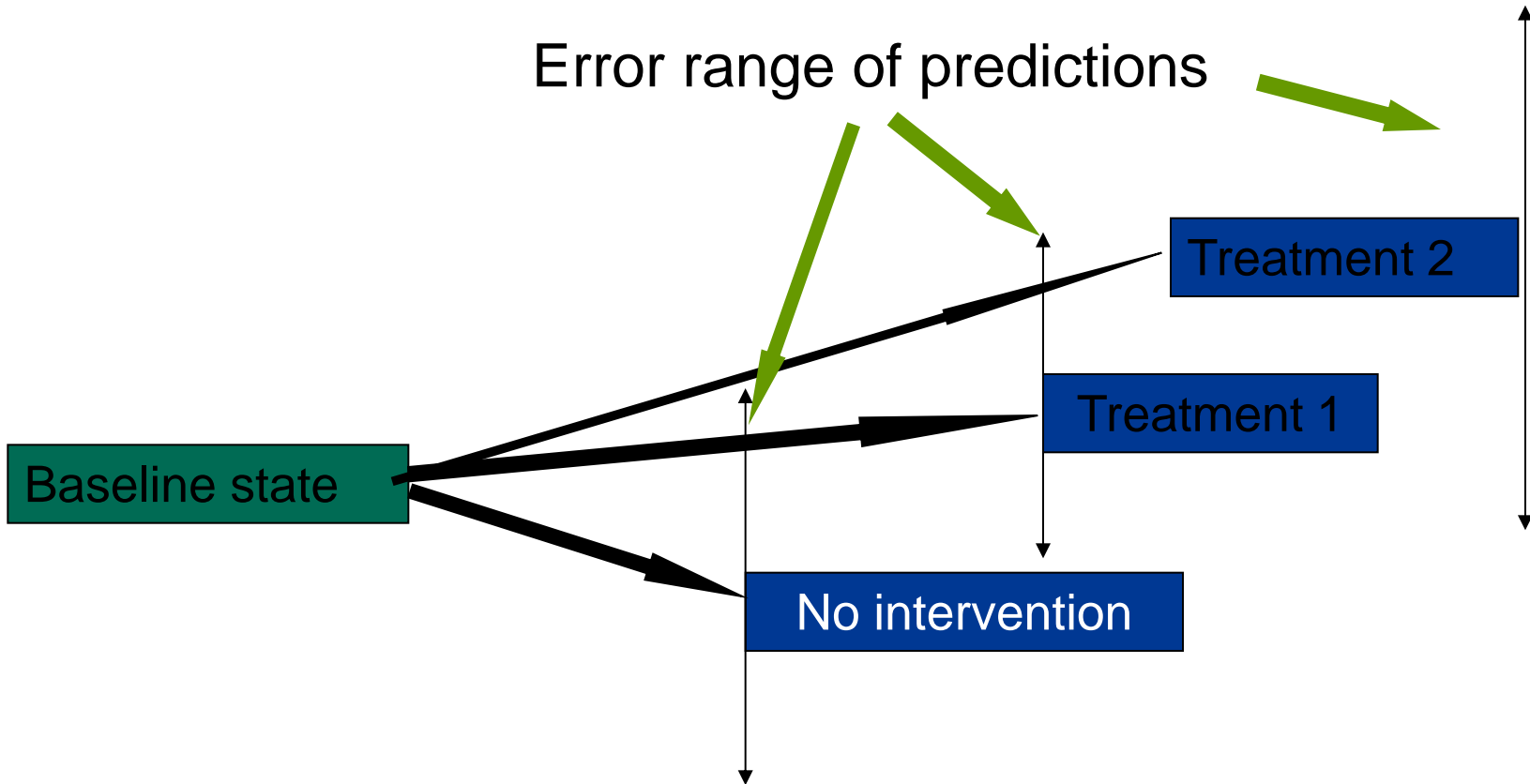
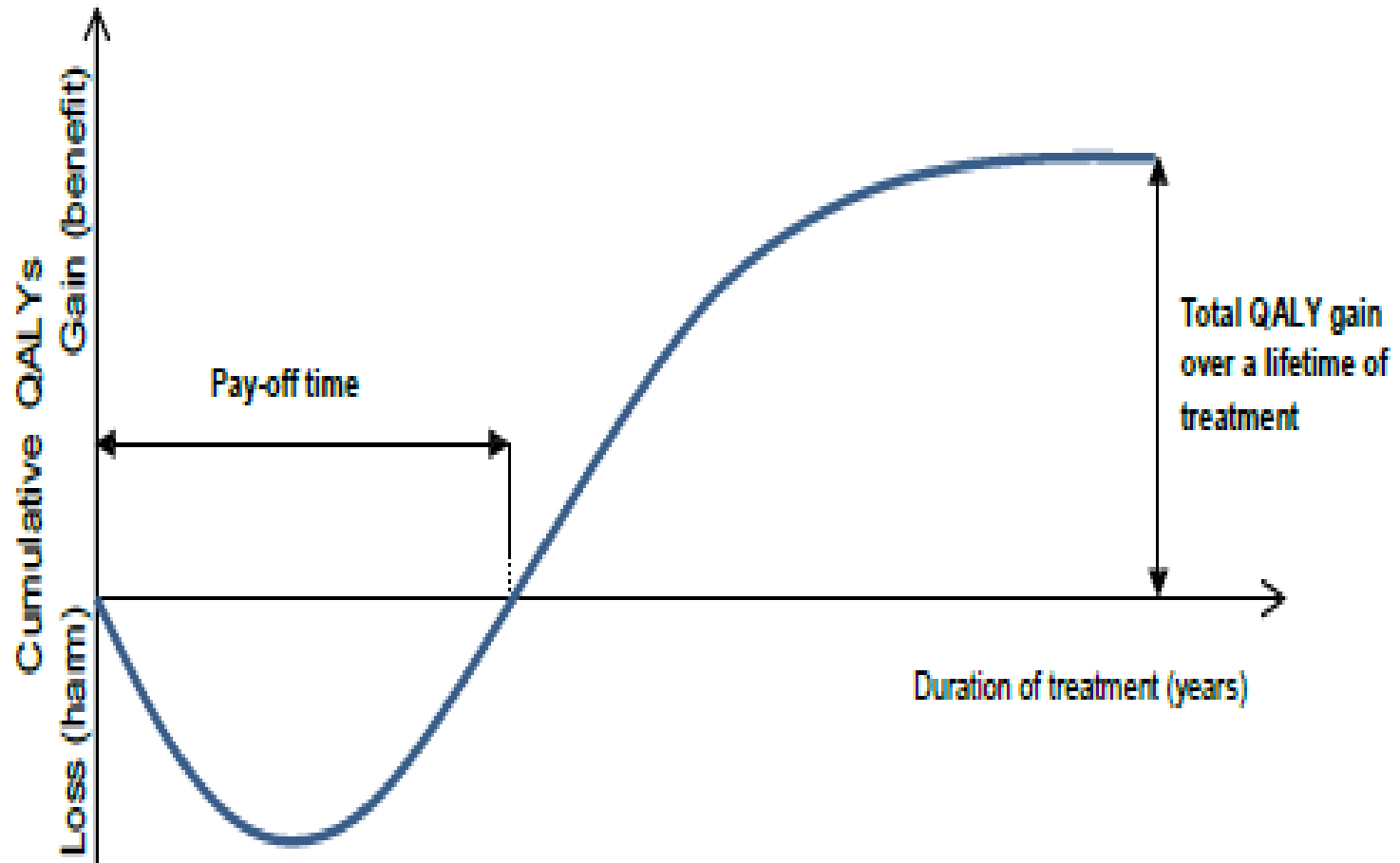
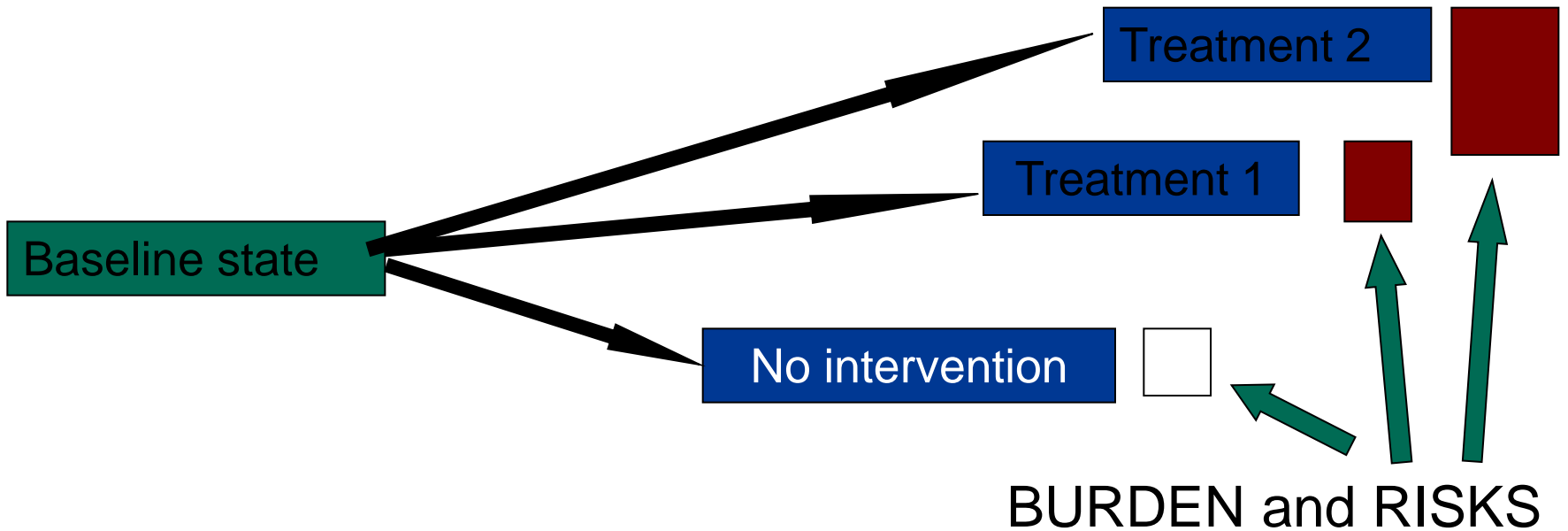


Figure 4: QALY profile plot showing cumulative QALYs over time

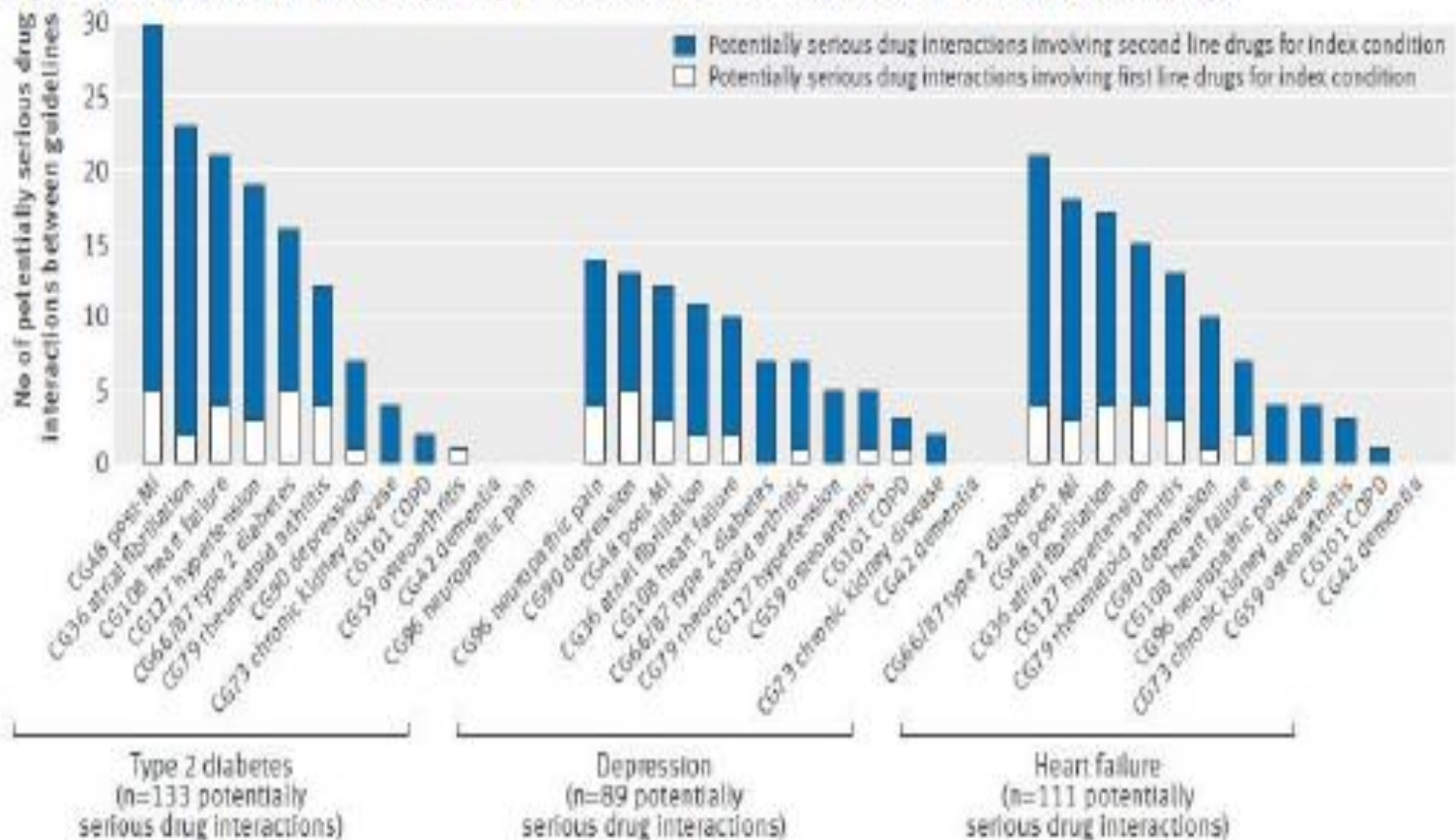


PREDICTING OUTCOMES



The potential impact of single condition guidelines

Figure 2: Potentially serious drug-drug interactions from combinations of recommended drugs.⁸



The patient must decide

- the value of the predicted difference in outcome
- the undesirability of the potential adverse effects
- the importance of the inconvenience, time, pain of the treatment and the monitoring

People are different about

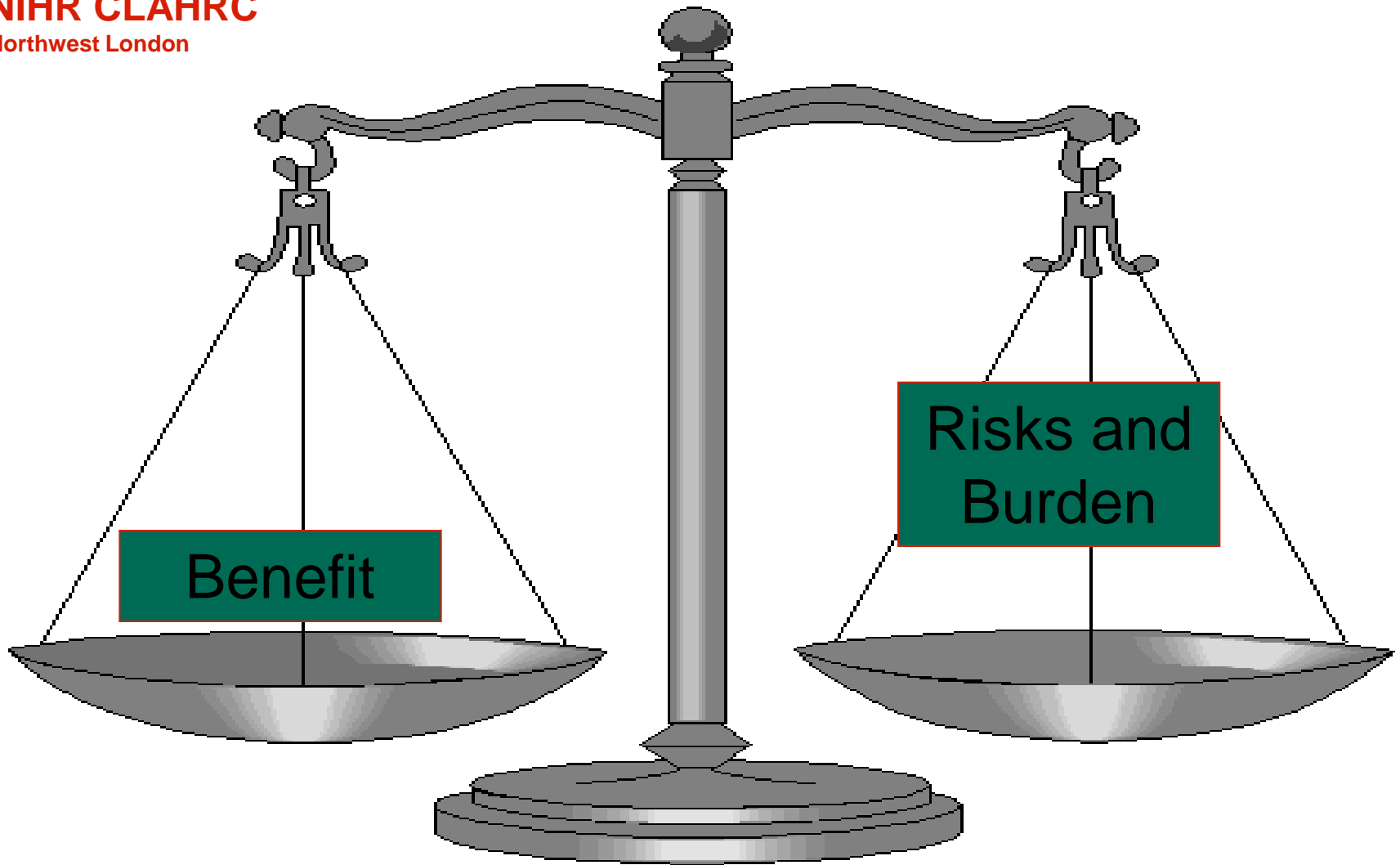
- The value they place on particular outcomes
- Degree of uncertainty they can accept
- Risks they are willing to accept
- Burden they are willing to endure

Informed decision means they can balance these factors in their decision about treatment options or no treatment

Their judgement will be affected by

- personal preference
- previous experience
- cultural beliefs about normality
- religious beliefs about duty etc (God)

At different stages of life, individuals place different value on the potential outcomes



Does the patient think the treatment worthwhile?

The potential overall benefit =

the **added** chance of
a specific outcome
x
the value of this
difference

—

the **added** chance (risk) of
adverse effect
x
the undesirability of this effect
+
BURDEN [inconvenience, time,
pain of the treatment]