**Chapter 6 Decision making in the health care sector: the role of public health – answers**

Self assessment

Question 1 of 6

Answer D – screening for colorectal cancer using sigmoidoscopy is an invasive and uncomfortable procedure and not likely to be acceptable to the population.

Question 2 of 6 Answer C Question 3 of 6 Answer C

In cost minimisation analysis, benefits are not measured. Cost benefits analysis measures benefits in natural units relevant to the intervention. Cost benefit analysis measures benefits in financial terms.

Question 4 of 6

Answer C – cost minimisation analysis. The costs of two interventions having the same indication were compared.

Question 5 of 6

Answer B – cost utility analysis. Outcomes are measured in terms of units such as QALYs can be compared across interventions.

Cost effectiveness analysis measures outcomes as natural units which will differ for different interventions. Cost minimisation analysis does not usually measure outcomes. Although measuring outcomes in financial terms allows comparison across interventions, cost benefit analysis gives a relatively narrow consideration of types of benefit.

Question 6 of 6

Answer B – cost utility analysis. Benefits are in the form of QALYs which can be compared across interventions.

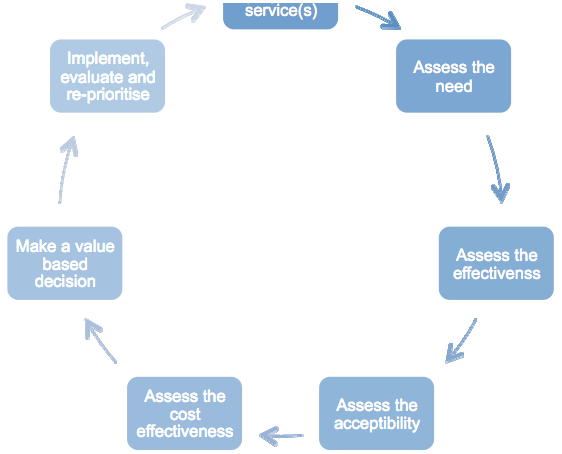
All of the other options are incorrect as we cannot compare benefits with the same unit. Short answer questions

Question 1 of 10

The key questions are:

* Is there a need for the service?
* Is there an intervention or service which is proven to be effective and which will meet this need?
* Is this intervention acceptable and appropriate for the healthcare system?
* Is the service cost effective?
* Is the service ethically justified?
* Overall can the service be justified in terms of need, benefit, acceptability, cost and other priorities?

These are outlined in this framework:



Question 2 of 10

One definition of need used particularly in health economics is the capacity to benefit from healthcare interventions. For example, in young sexually active individuals there is a need for chlamydia screening as the condition is prevalent and there is evidence that screening this population is beneficial.

Question 3 of 10

The potential problems include: limited availability of evidence and, even where available, its quality may not be high; outcomes of most public health interventions are due to the effect of multiple factors; and difficulties in disinvesting from ineffective interventions if they are already in widespread use. The benefits of public health interventions are difficult to cost, because they may occur sometime in the future.

Question 4 of 10

Economic evaluation is the comparative analysis of alternative courses of action in terms of both their costs and consequences.

Question 5 of 10

Opportunity cost is the amount lost by not using the resource in its best alternative use. It is the next best opportunity foregone. For example, the opportunity cost of providing trastuzumab (a drug for breast cancer) might be that some other procedures or interventions for cancer patients cannot be provided.

Question 6 of 10

Marginal cost is the extra cost of increasing output by one unit. Question 7 of 10

The four main types of economic evaluation are cost minimisation analysis, cost effectiveness analysis, cost utility analysis and cost benefit analysis.

Question 8 of 10

* It is argued that seeking to compare the incomparable (different treatments, different states) with crude tools is methodologically flawed and that their use oversimplifies complex healthcare issues by reducing what should be a multifaceted assessment of options to simple quantitative values.
* QALYs are not based on an individual’s assessment of value and the values determined by others may not reflect those of every patient.
* QALYs can be seen as “ageist”: reduced life expectancy results in lower QALY values so that interventions for elderly patients may compare poorly with those for young patients. Conversely, QALYs can be seen as “insufficiently ageist” if one considers that the elderly have already had a “fair innings” and the young are more deserving of treatment.
* QALYs may disadvantage those already disabled as their quality of life is already lower; interventions for the disabled may yield fewer QALYs than those for healthier people.
* QALYs may lack sensitivity within a disease area as not every subdivision within or level of a complex condition will have been valued and one value may be applied to sub- divisions with varying health states. (For example, the quality of life with a condition like depression might vary considerably depending upon the severity of the depression.)

Question 9 of 10

* Respect for autonomy. This important principle is implicit in the requirement for consent for procedures. It can be difficult to apply this principle to those who are unable to make informed decisions, such as minors or those with learning difficulties.
* Non-maleficence. Avoid harm. The need to avoid harm must frequently be weighed against the next principle when considering treatments with potential benefits and with some side effects.
* Beneficence. Do good. Too much beneficence can be paternalistic! For example, our need to prevent the harm caused by obesity might lead us to coerce overweight people into lifestyle changes.
* Justice. This principle reiterates the public health concept of equity in that a regard for fairness is important.

Question 10 of 10

* Veracity. The truth. It is difficult to make decisions based on falsehood but the ability to be able to identify one common truth is debated.
* Privacy. The right of patients to withhold information is seen to be important but may hinder the diagnostic process.
* Confidentiality. This is increasing important in modern healthcare and the need to handle patient identifiable data sensibly is plain throughout many healthcare systems.
* Fidelity. Trust. The relationship between clinician and patient requires trust; public health decisions which restrict treatments may jeopardise that trust.