This workshop exercise is based on an exercise conceived, and used, by Keith Tolley, Darrin Baines and Dave Whynes at the University of Nottingham with medical and allied health professionals. Here the suggestions have been changed to better suit a pharmacy student audience.

PHA-MHD1: Health Economics for prescribers
Dr Tracey Sach

Workshop week 3: Health care rationing

Learning objectives

Subject specific

This tutorial will:

- Introduce you to the ideas behind the explicit rationing of health care
- Highlight the difficulties in making decisions in health care and make explicit the opportunity costs of those decisions.
- Enable you to understand that rationing can involve value judgement

General

The workshop should provide opportunity for discussion and debate. During the workshop you will listen to your fellow student's views and voice your own opinions. You will be expected to critically appraise each others' decisions. Your communication and debating skills will be challenged by the need to reach a group consensus.

Instructions

Before the workshop: you should:

- Read the task and choose the suggestions you would choose to treat. Do **not** discuss this with others before the workshop.

At the workshop: we will:

- Share individual choices made with respect to the task and then have small group discussions to reach a consensus decision.

Task

All cash-limited health care systems are forced to take decisions about how much health care to provide and which patients to treat. Despite the obvious importance of such decisions, no consensus exists about what is the fairest way of making them. This exercise highlights the sorts of problems encountered.

The scenario is as follows. It is nearing the end of the financial year, when the business manager of a Primary Care Trust discovers that £6,000 of the Pharmacy budget for the year has not been spent. The surplus cannot be saved until next year and, if not spent, it must be returned to the Department of Health. To find the best way of spending this money the business manager sends a memo to practice pharmacists and general practitioners, requesting details of groups of patients who might be treated using the surplus funds. The following six suggestions are received:

Suggestion 1: Five children between the ages of 3 and 12 years are waiting to receive the newer antiepileptic drugs. The children come from mixed family backgrounds but all are finding that their quality of life is affected by their epilepsy; in particular their educational achievement is suffering. The cost of providing the newer drugs to all five children for a year is £1,435 and the expected gain in quality adjusted life years is estimated to be 0.05 per annum.

Suggestion 2: The patient concerned is a working mother aged 41 years with two children aged 10 and 6 years. Her husband died 5 years ago from prostate cancer. She has bravely fought her brain tumour but it has recurred after standard therapy and the doctors are now saying the only hope is treatment with temozolomide. However, temozolomide is not currently provided by the PCT or the NHS outside of clinical trials. There are currently no clinical trials of temozolomide in the area that she could participate in. The cost for four cycles of treatment is £6,000 and the benefits are unknown.

Suggestion 3: The PCT currently has two drug addicts seeking a supervised methadone programme. One is aged 18 years and has been addicted since he was 15 years old. The other is 25 years old and has been an addict for only two years after experiencing personal problems. Both are unemployed due to an inability to hold down a job. The financial cost of treating the two patients is £1,500 and it is believed the benefits would be 0.134 QALYs if they successfully kick their habit.

Suggestion 4: Three patients have unstable angina and are facing a high risk of death or MI. All three are highly successful business people, aged between 50 and 60 years, with stressful jobs managing a large number of employees. Without treatment with IIb/IIIa inhibitors they are likely to die within a month. All three could afford the treatment themselves but argue they shouldn't have to pay because they have contributed significant amounts of money in income tax and national insurance contributions over their working lives. All three smoke and the probability of them giving up is low. Two of the three plan to retire and go on extended foreign holidays. The financial cost of treatment for all three is at a slightly reduced cost of £1,500, due to the pharmacist being able to negotiate a discount with suppliers. The anticipated benefits are estimated to be 18 QALYs for treating all three.

Suggestion 5: One male patient aged 87 years is suffering from motor neurone disease a progressive degenerating disease leading to impaired speech, swallowing, and breathing. There is no cure for the condition but quality of life can be improved for the short period of life remaining by taking Riluzole. The patient desperately wants to be able to attend his granddaughters wedding in three weeks time in a reasonable health state which he believes this drug will help him achieve. The financial cost is £3,000 and the expected benefits are 0.09 QALYs.

Suggestion 6: One 25 year old with metastatic breast cancer would benefit from treatment with taxanes. Although she doesn't have any children she does have a husband and is an active volunteer across a number of local charities. The cost of treatment would be £3,000 (enough for the first two cycles to see if the patient starts to respond) and the anticipated benefits either 0 or 15 QALYs depending on whether the treatment is successful or not (about 1 in five women gain benefit from treatment).

The business manager is daunted by this list and decides to call a meeting of interested individuals (that's you !), in order to receive advice on which suggestions should be implemented (note that suggestions cannot be partially implemented, that is if it states 3 are needing treatment then three must receive the treatment or no one does).

Decide which sugestions you would wish to be treated, subject to the budget constraint. This decision will be taken on ethical grounds, although your views of ethics might well differ from those of others. For example, some people argue that a doctor must do everything possible for the particular patient in front of him/her, regardless of costs. Others believe that opportunity costs should be taken into account when determining the appropriate treatment for a patient. Some of you might feel that young people are "more deserving" of treatment than old, or that quantity of life is more important than quality of life, or that ……etc.

Examples: With your £6,000 you could afford:

- Suggestion 2 only, or
- Suggestion 6 and 5 or
- Suggestion 3, 4 and 6, or 1, 3 and 5 or 3, 4, and 5 or
- Fewer suggestions and save some money …

Summary of the data for the 6 suggestions:

Suggestion	Condition	No. seeking treatment	Age range (years)	Cost £	Expected QALY gain
1:	Epilepsy	5	3-12	1,435	0.05
2:	Brain tumour	1	41	6,000	?
3:	Drug addiction	2	18 & 25	1,500	0.134
4:	Unstable angina	3	50-60	1,500	18
5:	Motor neurone disease	1	87	3,000	0.09
6:	Metastatic breast cancer	1	25	3,000	0 or 15

Note: This data is made up for the purposes of this exercise.