

Exercise 1: Costing of health services*Estimated time to work (10 min)*

You have the following information from a trial for settings up an outpatient service for administration a chemotherapy drug for **patient** with colon cancer **per year**

Resource use per year	Frequency per year	Unit cost for one unit (Chemotherapy A)	Unit cost for one unit (Chemotherapy B)
<i>Drug regimen per patient</i>	12	12	25
<i>Disposable equipment (infusion) (JDs)per patient</i>	36	10	10
<i>side effect treatment</i>	25% for A, 30%, for B	40	30
Other resource uses			
<i>Monthly salary (capacity 200 patients per year)</i>	12	300	300
<i>Time of nurse needed to administrate chemotherapy (min) min</i>		25	15
<i>Overtime salary (JDs/hr)</i>		20	20
<i>Laptop</i>	1	300	300
<i>Chemotherapy unit overheads (lighting, heating) (JDs/ month)</i>	12	30	30

Calculate the following cost for setting up the service for chemotherapy A and B during the first year

A. Which costs are variable cost?

B. Which costs are overhead fixed?

C. Which costs are fixed capital/overhead costs?

D. Which costs are semi fixed?

E. Variable costs associated with treating 200 patients per year ?

F. Fixed cost associated for setting up the service (assuming the capacity) per year?

G. Total costs associated with setting up the service (assuming the capacity) per year ?

H. Average costs per patient for setting up the service over the first year?

I. The average marginal cost for treating new 30 patients?

Exercise 2 what type of cost ?

- *If a new clinic required a part-time pharmacist and a currently employed pharmacist was asked to fill in at the clinic as part of his or her duties (instead of hiring a new part-time pharmacist for the clinic). The hourly rate of the pharmacist multiplied by the number of hours spent at the clinic would be -----*
- *For chemotherapy treatment, costs of the chemotherapy products themselves, other medications given to reduce side effects of the chemotherapy, intravenous supplies, laboratory tests, clinic costs, and physician visits are _____*
- *Benefits or costs result from a reduction in pain and suffering related to a product or intervention is _____*
- *The costs that is related to patient, care govern loss of productivity or because of premature mortality is _____*

Exercise 3

Assuming the percentages of patients who remained alive LYG following the administration of chemotherapy A and B were 60%, 70% year, respectively over the first year. Please calculate the followings for the capacity (200 patients)

Is Chemotherapy B cost-effective compared with A ?

Draw the cost-effectiveness plan

Decide which quadrant the incremental CE point is in?

Do we need a cost-effectiveness threshold?

Exercise 5 CUA analysis

If the average utility associated with administering chemotherapy A and B were 0.8, 0.5 respectively? Using CUA analysis?

Calculate the average QALY for each intervention?

Draw the cost-effectiveness plan

Decide which quadrant the incremental CE point is in?

Do we need a cost-effectiveness threshold?