

LECTURE WEEK 6_2_WORKSHOP: Activity Based Costing

Qn 1

Acme Hospital plc operates in an increasingly competitive international market for routine medical and surgical procedures. The amount charged for a procedure is based on the cost of the procedure. This cost is currently determined by using an average cost per client bed-day, which is calculated by dividing the total budgeted expense for the hospital by the expected number of client bed-days for the year. This average rate is then multiplied by a factor of 0.7 for medical procedures and 1.2 for surgical procedures to reflect the general manager's perception of the relative use of resources for the procedures.

The general manager recognises that this costing system is no longer adequate and wishes to introduce an activity-based approach. The following data have been collected:

Budget expenses	£000
Surgical consultants' and registrar's salaries	420
Medical consultants' and registrar's salaries	210
Operating theatre staff salaries	200
Nursing staff salaries	720
Laboratory staff salaries	120
Administration and general costs	300
Admission staff salaries	36
Occupancy costs	750
Ward supplies	250
Theatre supplies	150
Laboratory supplies	25
Total	<u>3 181</u>

Budget data

Number of operation hours	1 250
Number of admissions	1 400
Number of specimens processed	15 000
Number of medical consultations/ Examination hours	2 150

The hospital has 24 client beds and expects an average of 75% occupancy through the year.

Area of departments	m²
Operating theatres and preparation rooms	250
Wards	600
Laboratory	200
Admissions department	50

Administration and general	200
Total	1 300

Notes:

A client for medical procedure will generate the following activities:

- Admission procedure
- Examination/consultation by a medical consultant or registrar
- Nursing and medication in a ward
- Specimen processing in the laboratory

A client for a surgical procedure will generate the following activities:

- Admission procedure
- Operating theatre procedure
- Nursing and medication in a ward
- Specimen processing in the laboratory

Required

- a) Calculate appropriate cost driver transaction rates for the hospital
- b) Using the rates calculated in a), determine the activity based cost for the following clients' treatment:
 - A medical client spent 10 days in the hospital, was seen by doctors for a total of two hours and had 26 specimens tested.
 - A surgical client spent four days in the hospital, three hours in the operating theatre and had six specimens tested.
- c) Using the existing costing process, calculate the costs for the two treatments specified in b).
- d) What benefits and costs would accrue to the hospital if it adopted the activity based approach?