

Module 4: Part 1 – Homework – Departmental Costing and Cost Allocation

Use the following information to answer the following questions.

Department	Revenues	Expenses	Space (square Feet)	Number of Procedure
Facilities (support dept)		\$ 1,500,000	10,000	
Accounting - Billing (support dept)		\$ 2,000,000	20,000	
<i>Total for Support Departments</i>		<i>\$ 3,500,000</i>	<i>30,000</i>	
Routine Care (patient services)	\$ 30,000,000	\$ 10,000,000	150,000	500,000
Intensive Care (patient services)	\$ 25,000,000	\$ 8,000,000	100,000	450,000
Diagnostic Services (patient services)	\$ 20,000,000	\$ 6,000,000	75,000	375,000
<i>Total for Patient Service Departments</i>	<i>\$ 75,000,000</i>	<i>\$ 24,000,000</i>	<i>325,000</i>	<i>1,325,000</i>
Grant Total	\$ 75,000,000	\$ 27,500,000	355,000	1,325,000

#1. Facilities has a total cost pool of \$1,500,000. The cost driver has been determined to square footage. What would the allocation rate be for facilities?

- Choice A: Not enough information to tell.
- Choice B: \$4.62 per square foot
- Choice C: \$8.00 per square foot
- Choice D: \$14,000,000 dollars

#2. Accounting - Billing has a total cost pool of \$2,000,000. The cost driver has been determined to number of procedures. What would the allocation rate be for Accounting/Billings?

- Choice A: \$1.51 per procedure
- Choice B: \$11.31 per procedure
- Choice C: \$9.32 per procedure
- Choice D: \$75,000,000 dollars

#3. Now that you have calculated the allocation rate for facilities. What is the amount of facilities related expense that you would allocate to the Routine Care Department?

- Choice A: \$1,500,000
- Choice B: \$24,000,000
- Choice C: \$693,000
- Choice D: \$25,000

Module 4 - Part 1 - SOLUTIONS to Homework - Departmental Costing and Cost Allocation

#4. Now that you have calculated the allocation rate for Accounting/Billing. What is the amount of Accounting/Billing's related expense that you would allocate to the Routine Care Department?

- Choice A: \$540,000
Choice B: \$630,000
Choice C: \$755,000
Choice D: \$875,000

#5. What would be the total expense for the Routine Care department (this is the addition of direct department expenses and allocated indirect costs).

- Choice A: \$912,750
Choice B: \$1,448,000
Choice C: \$3,750,000
Choice D: \$11,448,000

#6. What do you notice about the allocation of the indirect expenses when this is done properly?

- Choice A: The total allocated amount is the same as the beginning indirect total (within a range of less than 1%)
- Choice B: The amount allocated will always be substantially (>10%) greater than the beginning Amount
- Choice C: The amount allocated will always be substantially (<10%) less than the beginning amount
- Choice D: Not enough information to tell.

#7. What are the different types of allocation techniques

- Choice A: direct
- Choice B: step-down
- Choice C: reciprocal
- Choice D: all the above



Module 4 - Part 1 - SOLUTIONS to Homework - Departmental Costing and Cost Allocation

Using the same numbers as we will calculate using the **Step-Down Method**. In this example, it has been determined to *step-down* **Facilities expenses** to the rest of the support departments and to the direct or patient service areas.

Department	Revenues	Expenses	Space (square Feet)	Number of Procedures
Facilities (support dept)		\$ 1,500,000	10,000	
Accounting - Billing (support dept)		\$ 2,000,000	20,000	
<i>Total for Support Departments</i>		<i>\$ 3,500,000</i>	<i>30,000</i>	
Routine Care (patient services)	\$ 30,000,000	\$ 10,000,000	150,000	500,000
Intensive Care (patient services)	\$ 25,000,000	\$ 8,000,000	100,000	450,000
Diagnostic Services (patient services)	\$ 20,000,000	\$ 6,000,000	75,000	375,000
<i>Total for Patient Service Departments</i>	<i>\$ 75,000,000</i>	<i>\$ 24,000,000</i>	<i>325,000</i>	<i>1,325,000</i>
Grant Total	\$ 75,000,000	\$ 27,500,000	355,000	1,325,000

#8. Facilities has a total cost pool of \$1,500,000. The cost driver has been determined to square footage. What would be the **new** allocation rate be for facilities?

- Choice A: \$4.35 per square foot
- Choice B: \$5.51 per square foot
- Choice C: \$4.62 per square foot
- Choice D: \$75,000,000 dollars

#9. How much would Facilities expense be allocated to the Accounting/Billing Department?

- Choice A: Nothing it is an indirect department
- Choice B: \$75,000
- Choice C: \$87,000
- Choice D: \$92,000

#10. After the allocation of Facilities to the Accounting/Billing department – what would be the new cost pool for the Accounting / Billing Department?

- Choice A: \$2,087,000
- Choice B: \$3,000,000
- Choice C: \$5,000,000
- Choice D: \$100,000,000,000 (Hint – this is not the correct answer)

Module 4 - Part 1 - SOLUTIONS to Homework - Departmental Costing and Cost Allocation

11. Accounting - Billing has a total cost pool of \$2,087,000. The cost driver has been determined to number of procedures. What would the allocation rate be for Accounting/Billings?

Choice A: \$11.31 per procedure

Choice B: \$1.58 per procedure

Choice C: \$3.32 per procedure

Choice D: \$8.00 per procedure

#12. Now that you have calculated the **new** allocation rate for Accounting/Billing. What is the amount of Accounting/Billing's related expense that you would allocate to the Routine Care Department?

Choice A: \$790,000

Choice B: \$650,000

Choice C: \$755,000

Choice D: \$975,000

#13. What would be the total expense for the Routine Care department (this is the addition of direct department expenses and allocated indirect costs).

Choice A: \$712,750

Choice B: \$1,593,000

Choice C: \$11,442,500

Choice D: \$6,919,780