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## Allocation and the Emergency Department

We are a group of interns at Valley Medical Center. The VP of Finance has decided that it would be a good idea to exercise our knowledge of accounting that we have accumulated at Bellevue College. One of the largest departments of VMC is the Emergency Department. Our task at hand is to determine the costs associated with the ED at VMC. It is our job to use the costs from supporting departments to research what costs can and should be allocated to the Emergency Department.

To disperse expenses from the supporting departments, we used activity-based-costing

to determine the costs of each of the Emergency Department level charges.

Activity-based-costing was used because it is more detailed than the traditional method of allocating costs. The traditional method groups all costs together, regardless of the type of cost. For example, direct, indirect, and other costs are clumped together under the traditional method. The traditional method is also more appropriate for external reporting. ABC gives us the choice of what costs will be used. It gives us a more realistic perspective on costing than the traditional method. Yet, ABC is a fairly time consuming costing method. It is also difficult to determine what percentages to use for each cost pool. Thus, it is only used within companies for internal reports to better understand the application of overhead cost to different cost

drivers.

Activity-based-costing uses cost drivers to assist us in allocating the different types of costs associated with the ED. In the project, we were given twelve supporting departments. In the data provided there were three possible cost drivers: square footage, employees, and pounds of linen. We used these cost drivers to assist us in determining the appropriate allocation of overhead cost to each department.

After determining the total costs, which included direct, indirect, and other costs, incurred for Emergency Department, we used the total cost of \$58,067,560.05 into determining the individual cost of each ED level service charge. We knew that ED charge level 2 used two times more resources than level 1 and level 3 used three times more resources than level 1, and so forth for levels 4 and 5. With this knowledge we used an algebraic expression to decide how much of the total cost is incurred with each service level charge. Level 1 was labeled as X, then level 2 was labeled as 2X, and so forth for the level 3= 3X, level 4=4X, and level 5=5X. Once we found the individual total cost for each level service charge, we took that total and divided by the volume performed for each level during the year to find the cost incurred to perform one service charge. Each service has a different amount of cost to the department.

The Emergency department, as a whole department at Valley Medical Center is not profitable. However, several of the ED charge levels separately are profitable. Some ED levels are more profitable than others. The ED charge level 1 is not profitable. For service level 1, the total cost associated with the level was \$3,871,170.67, then divided by the volume of the service performed of 3,924, gave us the cost per service, \$986.54. This dollar amount tells us that it cost the ED \$986.54 to perform this service, but the charge price to patients is \$267.55.

This means the ED is incurring a loss in order to perform a level 1 service, with a profit margin of -\$718.99. The ED charge level 2 is also unprofitable. The profit margin for ED level 2 is -\$794.89. Level 2 charge is also the most costly to perform, with a cost of \$1,240.16 per service, and it has the lowest profit margin. ED charge level 3 has a positive profit margin of \$628.40. ED level 4 has the highest profit margin at \$1,204.25. Charge level 4 also has the lowest cost to provide at \$358.18 per service. And lastly, ED charge level 5 was the second most profitable with a profit margin of \$1,158.74.

Doctors should have the right to determine what charges should be applied to each patient because they have the skills necessary to assess a patient's medical needs. The advantage of doctors determining the ED charge for their patients is the increased accuracy of the costing data. This will help to make better financial decisions for future costs. The disadvantage of allowing the doctors to determine the ED charge for their patients is that many doctors are biased, thus overcharging of patients may occur. Doctors are susceptible to ethical dilemmas and issues. For example, some medical professionals are at risk to "separation of duty". Doctors may charge patients more if there is a bonus program for doctors at VMC. If doctors get a bonus in pay depending on which ED level charge they administer, they may be more likely to charge patients that specific level of care, even if the patient should really have been charged for another level. Misdiagnosing patients in order to charge them a higher price is also unethical.

It is always good to be profitable, regardless of the type of business. Profit covers costs and in return it gives the department positive income. With positive income, the ED department may be able to lower the level of charges for patients, therefore, increase the number of

patients it serves. The department will be able to hire more direct-care employees, which will increase patients' satisfaction and allow to serve a greater number of people. With increased income, the ED can assist more patients that cannot personally afford medical care in covering their costs. In addition, with positive income, new medical equipment may be upgraded or purchased more frequently.

On the other hand, the fact that the Emergency Department is not profitable may not necessarily be bad. Valley Medical Center can make a stronger case to receive more money from the insurance companies. With this data, the hospital can demand that the insurance companies withhold less of the contractual allowance taken from the ED level charges. The hospital may also receive an increase in subsidies from the government if it is clear that the ED department is not making a profit. The government would like the Emergency Department to be operational for the access of the community, so it would be reasonable to give VMC an increase in subsidies.

The goal of the project was to determine whether or not the Emergency Department at Valley Medical Center is profitable. After a close analysis, we have determined that the ED is operating at a loss. As financial analysts, we recommend that the ED perform more service of the levels three, four, and five, because these levels of service are more profitable than levels one and two. The costs for providing levels one and two exceed the revenue from these services and therefore result in a loss to the department. Performing more service of levels three, four, and five may offset the large costs of the first two levels.