

COST EXERCISE:

Yesterday, you and your EMS director, Eleanor Rigby, met with representatives from Yellow Submarine Medical (YSM) to receive a proposal for the new ZolPak 2050 monitor/defibrillator - a state of the art device, featuring advanced communication, data and AI capabilities. As medical director, you consider this a mandatory acquisition to retain the Penny Lane EMS (PLEMS) system's standing as a leader in out of hospital care, both in its community and nationally. The cost per device is \$30,000.

PLEMS is an Advanced Life Support (ALS) response system with approximately 30,000 incidents annually, transporting approximately 25,000 patients. To ensure both adequate geographical coverage and optimum response times, PLEMS deploys 20 ALS units operating 24/7. PLEMS has a policy of having an additional 20% inventory to ensure redundancy and to provide a device for the physician response vehicle.

Director Rigby recognizes that you have had something of a long-standing collaboration with YSM and has left the final negotiations to you, but stresses that the cost must be within budget. PLEMS has been using the current ZolPak for five years with excellent results. YSM has advised that a reasonable discount is available if all units are purchased in a single acquisition. In addition, it will take the same number of units of the past model in trade at \$5000/unit.

Director Rigby is willing to help cover the cost of this purchase through the agency's funded depreciation account. She has asked you to provide the annual costs of the purchase at the next meeting.

Questions:

What is the total number of units needed?

What reasonable discount will you request?

What do you consider to be a reasonable estimate of the useful life years?

What is the revised cost of each unit accounting for these discounts?

What is the annual cost for this purchase?

REVENUE EXERCISE:

For a suburban system, Director Rigby operates quite an efficient operation. The unit hour cost is essentially the national median at \$200 and currently the unit hour utilization ratio is 0.28.

PLEMS will soon incorporate the small city of Norwegian Wood into its service area, which will add an additional 225 transports to the total. Based on careful analysis, Director Rigby has assessed that there is no need to add unit hours. The result will be an increased efficiency to a 0.29 unit hour utilization.

Gracious as most EMS directors are, Director Rigby has agreed to also help with the revenues needed with some stipulations: first, the savings from only the additional transports will be used to fund the units; second, 50 percent of the revenues collected from patient fees in the new service area can be used for the purchase. The average bill is \$1500 with an average collection of 43%.

Questions:

Before the addition of Norwegian Wood, what is the cost of transport?

After the addition of Norwegian Wood, what is the cost of transport?

What is the savings amount to be applied?

What is the amount of newly collected revenues from patient fees to be applied?

What are the total revenues?

SUMMARY

Are the revenues sufficient to cover the cost of the purchase?

If not, what options do you have to raise additional revenue?

What would be the impact of raising rates? What information would you need to determine that?