

## ACCT615 Unit 4 IP

Pathos Radiology Center (PRC) performs X-rays, ultrasounds, computer tomography (CT) scans, and magnetic resonance imaging (MRI). PRC has developed a reputation as a top radiology center in the state. PRC has achieved this status because it constantly reexamines its processes and procedures. PRC has been using a single, facility wide overhead allocation rate. The vice president of finance believes that PRC can make better process improvements if it uses more disaggregated cost information. She says, "We have state-of-the-art medical imaging technology. Can't we have state-of-the-art accounting technology?"

### Pathos Radiology Center Budgeted Information for the Year Ended May 31, 2022

|                                       | X-rays           | Ultrasound       | CT Scan          | MRI                | Total              |
|---------------------------------------|------------------|------------------|------------------|--------------------|--------------------|
| Technician labor                      | \$ 62,000        | \$101,000        | \$155,000        | \$ 103,000         | \$ 421,000         |
| Depreciation                          | 42,240           | 256,000          | 424,960          | 876,800            | 1,600,000          |
| Materials                             | 22,600           | 16,400           | 23,600           | 31,500             | 94,100             |
| Administration                        |                  |                  |                  |                    | 20,000             |
| Maintenance                           |                  |                  |                  |                    | 250,000            |
| Sanitation                            |                  |                  |                  |                    | 252,500            |
| Utilities                             |                  |                  |                  |                    |                    |
|                                       | <u>\$126,840</u> | <u>\$373,400</u> | <u>\$603,560</u> | <u>\$1,011,300</u> | <u>\$2,788,700</u> |
| Number of procedures                  | 3,842            | 4,352            | 2,924            | 2,482              |                    |
| Minutes to clean after each procedure | 5                | 5                | 15               | 35                 |                    |
| Minutes for each procedure            | 5                | 15               | 25               | 40                 |                    |

RRC operates at capacity. The proposed allocation bases for overhead are:

|                               |                                                     |
|-------------------------------|-----------------------------------------------------|
| Administration                | Number of procedures                                |
| Maintenance (including parts) | Capital cost of the equipment<br>(use Depreciation) |
| Sanitation                    | Total cleaning minutes                              |
| Utilities                     | Total procedure minutes                             |

1. Calculate the budgeted cost per service for X-rays, ultrasounds, CT scans, and MRI using direct technician labor costs as the allocation basis.
2. Calculate the budgeted cost per service of X-rays, ultrasounds, CT scans, and MRI if PRC allocated overhead costs using activity-based costing.
3. Evaluate the differences between the two costing models and assess the value of activity-based-costing for management profitability analysis and decision making.
4. Explain how the disaggregation of information could be helpful to PRC's intention to continuously improve its services.