

By Niklaus B. Fincher

Equipment Budgets

Make or Break a Project

Construction of medical facilities, including new buildings or renovation to existing structures, is booming. Experts estimate the value of current projects under construction, or those in the planning stages with construction beginning within the next 12 months to be valued at approximately \$40 billion to \$60 billion. This level of activity may slow down slightly, but it is expected to continue for at least the next five years.

One of the key, and sometimes mysterious aspects of managing the flow of dollars through these projects is developing and managing the budgets for medical capital equipment that will be used by staff. On average, medical capital equipment will account for approximately 15 percent to 20 percent of the total project cost. Based on the projected amount of construction activity, this represents approximately \$6 billion to \$9 billion worth of equipment purchases.

With medical capital consuming such a large portion of an overall project budget, it is vital that the budget be well developed and accurate. Depending on the project scope, a variation of 10 percent to 30 percent could have a significant impact on whether a project is finished on budget and includes all of the equipment necessary to support the clinical operations. As an example, a project with an overall budget of \$100 million will have a medical equipment budget of \$15 million to \$20 million. If the equipment budget is inaccurate by 20 percent the variance could amount to \$3 million to \$4 million.

For many projects, the importance of a well-developed medical equipment budget is important enough that profes-

sional equipment planners are hired as part of the project management team. These planners work closely with the rest of the team, to make sure that not only is the equipment budget developed and maintained throughout the project, but that the equipment selected is appropriate for the project scope.

Professional equipment planners' responsibilities include developing the equipment list, assigning the appropriate dollars per item, working with the project team to define equipment needs related to project scope, and working with clinical staff to understand its equipment requirements.

They also are responsible for making sure the equipment list and corresponding budget account for contingencies, which can be both anticipated and unanticipated cost factors. Examples of anticipated contingencies are the cost of shipping, uncrating, and installation of equipment. Unanticipated contingencies might include cost increases for the items budgeted that cannot be purchased until the project is close to completion,

The Impact of Benchmarking Prices off GPO Contracts

The chart below illustrates the impact accurate cost forecasting, using GPO pricing as a benchmark, can have on a project equipment budget.

	Single Facility	Multifacility	IDN with Multifacility
Total Equipment Budget	\$20,000,000	\$60,000,000	\$100,000,000
GPO Contract Coverage	70%	70%	70%
Minimum Savings Via GPO Contract	25%	25%	25%
Minimum Value (reduction to budget)	\$3,500,000	\$10,500,000	\$17,500,000
Redistribution of Administrative Fees	50%	50%	50%
Administrative Fee Value	\$105,000	\$315,000	\$525,000
Total Value	\$3,605,000	\$10,815,000	\$18,025,000

Assumptions:

- GPO contract portfolio covers 70 percent of equipment to be purchased for the project.
- 25 percent additional savings is based on minimal average discounts achieved on equipment purchases through GPO contracts.
- Administrative fee redistribution assumes administrative fees generated on equipment purchased through GPO contracts average 2 percent and that 50 percent is redistributed to the member.

which may be a couple of years after the budget was developed.

To combat the effect time can have on an equipment budget, project teams and equipment planners try to anticipate changes and their cost on the equipment. For example, most project equipment budgets contain contingency dollars that can be used in the case of a change, which would have a negative impact on the cost of the item. Interestingly, in some cases the contingency dollars can have a negative impact on the budget, as well as the overall project. Too many contingency dollars and the project will come in over budget. The project team may decide to cut items from the budget to hold down the cost. Too few contingency dollars and there may not be enough money in the budget to buy all the necessary items.

A common mistake organizations make when developing an equipment budget is building in contingency

dollars on a line-item basis. This method assumes that all of the equipment items in the project, which could number in the thousands, will be affected similarly by cost changes. In some cases, equipment planners and clinical staff may assign contingency dollars on a line-item basis that varies from item to item.

For example, the clinician may have been informed by a vendor sales representative to expect a price increase that exceeds the normal consumer price index increases. In addition, other items in the budget could reflect increases of CPI or percentages less than CPI. As a result, contingency funds or percentages that vary by item nearly always become impossible to manage.

A second mistake is basing projected costs of the equipment on the retail or list price of the item. Very few healthcare organizations ever pay list price for equipment, especially on items purchased in multiples or aggregate for a project. Usually, they can expect significant cost reductions based on volume.

Nevertheless, the planning team may use the difference between the list price and the price that actually will be paid as an additional contingency fund. Add that to the contingency percentage and you begin to see how an equipment budget can become unreasonably inflated. Inflated budgets inevitably will result in reductions in the amount of equipment included in the project.

Well-developed budgets should include contingency dollars, but the amounts or percentages should be applied below the total for the project equipment budget. This allows the variance to be visible and managed. Ideally, the contingency percent-

age should be applied to a projected equipment budget that represents as closely as possible the amount the team expects to actually pay for the equipment.

Most healthcare organizations are members of a GPO (group purchasing organization). As a member of the GPO, they will have access to pre-negotiated discounts on much of the equipment that will be used in the project. In some cases, facility staff may be able to negotiate even deeper discounts than those available through the GPO due to the volume of equipment being purchased for the project.

If a facility expects to minimally receive the discounts available through its GPO, use of the GPO pricing would project equipment costs closer to the amount that actually will be paid for the equipment. This variance in price can be significant. GPO discounts could decrease the price of equipment items by 20 percent to 40 percent. In addition, most GPO contracts include administrative fees. A portion of these fees generally are returned to the facility as a reward for participation in the contract.

Ultimately, the goal is to make sure a project is completed on time, on budget, and contains the equipment necessary to meet the healthcare delivery expectations of patients and staff. Too many times and on too many projects the medical equipment budget becomes the target of reductions because it was not well developed from the start.

Budgeting for equipment should start as early in the planning process as practical. In addition, the equipment budget team should be an integral part of the overall project team. Well-defined rules regarding budget management and contingency fund allocations will make sure unnecessary cuts are not made. ■



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Get it right

The following is a list of steps that project teams can take to increase the accuracy of their capital equipment budgets, and ensure they are able to purchase all of the equipment the project requires:

- 1** Depending on the project scope, enlist the services of professional equipment planners as early as possible.
- 2** Seek out automated equipment planning software systems that allow you to develop equipment lists, budgets, and manage specification data.
- 3** Make sure the project team includes the individual responsible for supply-chain cost reduction for the facility or customer. This individual, typically the director of materials management, will be the most familiar with the organization's relationship with the GPO.
- 4** Benchmark GPO pricing to more accurately forecast what equipment will cost versus using list or retail as the initial benchmark.
- 5** Be sure the equipment planners, the materials manager and clinical staff have a good working relationship and meet frequently throughout the project.
- 6** Add contingency funds, as required, below the total number for the projected cost. These funds can be designated to cover expenses such as price increases, shipping, installation, tax, equipment relocation, etc.
- 7** Create a project responsibility list to clarify who has responsibility for items that could be a part of multiple budgets. (Example: For some projects furniture is included in the equipment budget. For others, it is not.)
- 8** Look for opportunities to standardize types or brands of equipment to increase the volume you will purchase from a single supplier, thereby increasing your negotiation leverage for reduction in cost.
- 9** Procure equipment in aggregate or groups to increase the volume and reduce the price.
- 10** Refrain from making too many changes to the equipment list, especially as you move through the project phases. Try to get the list correct as early as possible, reducing the need for change orders later in the project.