



Is outsourcing not saving you much?

In their struggle to survive in the managed-care era, many hospitals have embraced outsourcing as the solution of choice for saving money. Biomedical equipment support is one of the services that are increasingly outsourced. In the last quarter I have heard several anecdotal reports or different degrees of satisfaction with the results. The savings achieved are often no more than 10 to 15 percent, with only a few that reached 30 percent.

On the other hand, many are experiencing a serious deterioration in quality. Repairs are taking much longer than previously. The new staff is less qualified and experienced, and much less willing to get involved with issues not directly related to equipment maintenance, such as user training, acquisition support and technology planning. A few hospitals are so disillusioned that they have decided to reconstruct their in-house teams.

Critics and some in-house biomedical engineering champions are likely to use these examples to substantiate their claim that the outsourcing model does not — and cannot — work.

Proponents and multivendor independent service organizations (ISOs) are likely to dismiss these cases as exceptions, pointing out that most hospitals that have outsourced their services are still retaining them — and that more hospitals are willing to jump on the outsourcing bandwagon.

I think both sides are wrong. These cases should be taken seriously as early warnings by both hospital administrators and multivendor ISOs. The administrators should learn that outsourcing is not a simple decision. You first need to determine whether outsourcing is the right approach. Next you need to find the right service provider, one who is

willing to commit to a clearly defined set of performance criteria in addition to the cost reduction. Last, but not least, you need to set up means of monitoring the performance and customer satisfaction, often by appointing a contract supervisor (or “watchdog”) within your organization.

The multivendor ISOs have a much tougher lesson to learn than their customers. So far most outsourcing companies have not used any innovative approach to deliver services. Typically they dismiss the highest-paid clinical engineers, senior biomedical-engineering technicians and administrative support staff, and retain the “less-expensive” (and less-experienced) technicians. The most experienced BMET becomes the supervisor of the “new” operation. Sometimes long-distance support is provided via telephone and a traveling supervisor occasionally drops in to monitor progress and smooth over customer dissatisfaction.

This formula provides a one-time savings of 10 to 20 percent. Since this is almost entirely derived from personnel cuts, no further savings will happen in the future. On the other hand, the loss of clinical engineers and senior BMETs will inevitably lead to lower quality in the support provided to the clinical staff and management.


More significant savings with simultaneous improvement in quality can only be achieved with a change in paradigm. Instead of setting up low-cost in-house teams, multivendor ISOs should take a comprehensive, hierarchical approach. Here’s an example:

Within a given geographic area, each customer hospital has a team capable of performing simple repairs and routine preventive maintenance. Complex equipment and extensive repairs are funneled to a regional service center equipped with test and measurement devices and more experienced BMETs. Equipment that cannot be moved is serviced by a group of field-service personnel. A team of clinical engineers manage the entire area, providing supervision as well as high-quality support to the clinical staff and management. Quality of service is monitored by a dedicated staff who randomly sample equipment in the service center and make unannounced visits to hospital teams. Naturally the exact configuration depends on the number of hospitals served and their level of technology sophistication. Through this sharing of resources, costs can be contained without sacrificing quality.

In order to go beyond the 30 percent savings plateau, an even more dramatic paradigm shift is needed:

When all the equipment from different hospitals can be combined and managed as a single group of assets, it is possible to further extend the benefits of the previous model. By putting all mobile equipment, for example, into a single pool, a hospital can significantly reduce its capital investments as well as its service costs. Equipment is moved from locations where it’s not needed to where it is needed, so there’s much less need for overbuying and overstocking. Downtime is drastically reduced as faulty equipment is simply replaced (typically within the same day) rather than held aside while awaiting repair. Although installed equipment cannot be easily moved, accessories and sub-systems can. Service quality and efficiency both benefit from a larger pool of technical talents who can now be highly trained and specialized. Stocking parts and accessories is more affordable, thanks to lower parts-per-equipment stocking costs. The combined volume also increases the bargaining power to reduce acquisition costs for equipment, replacement parts and services. Standardization in a limited number of brands and models is no longer imperative. Each user can get the equipment he or she prefers for that particular type of treatment or pathology.

Neither of these two scenarios is original, let alone far-fetched. Both could be more widely implemented, but rewards are only for those willing to take risks.

By the way, once you agree to let an outsource company “take over” your equipment, it may only be a matter of time before they hint about the possibility of taking over your operators as well. That will be the next paradigm shift. 

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